

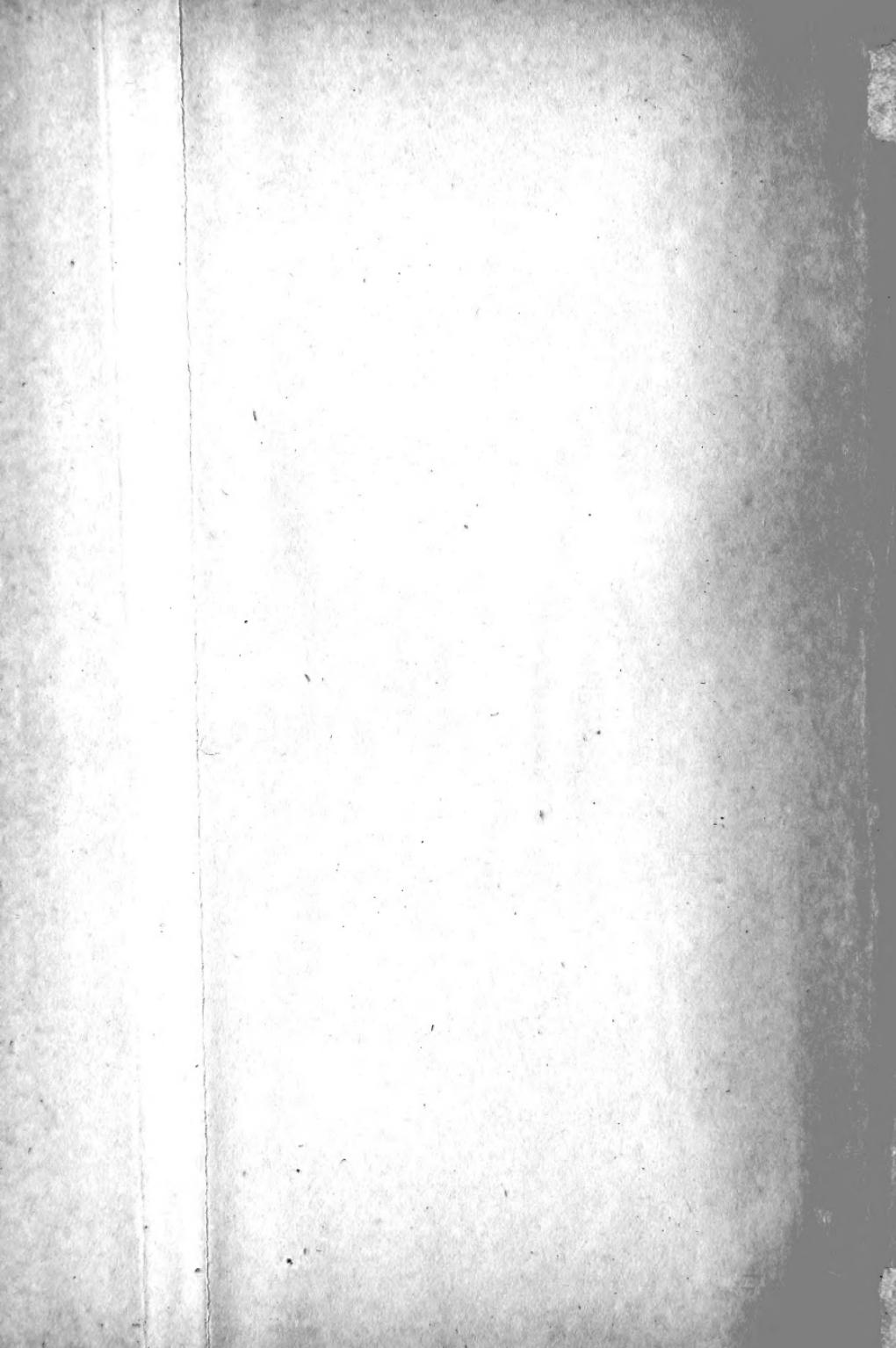
**THE
HORSE TRAINER.**

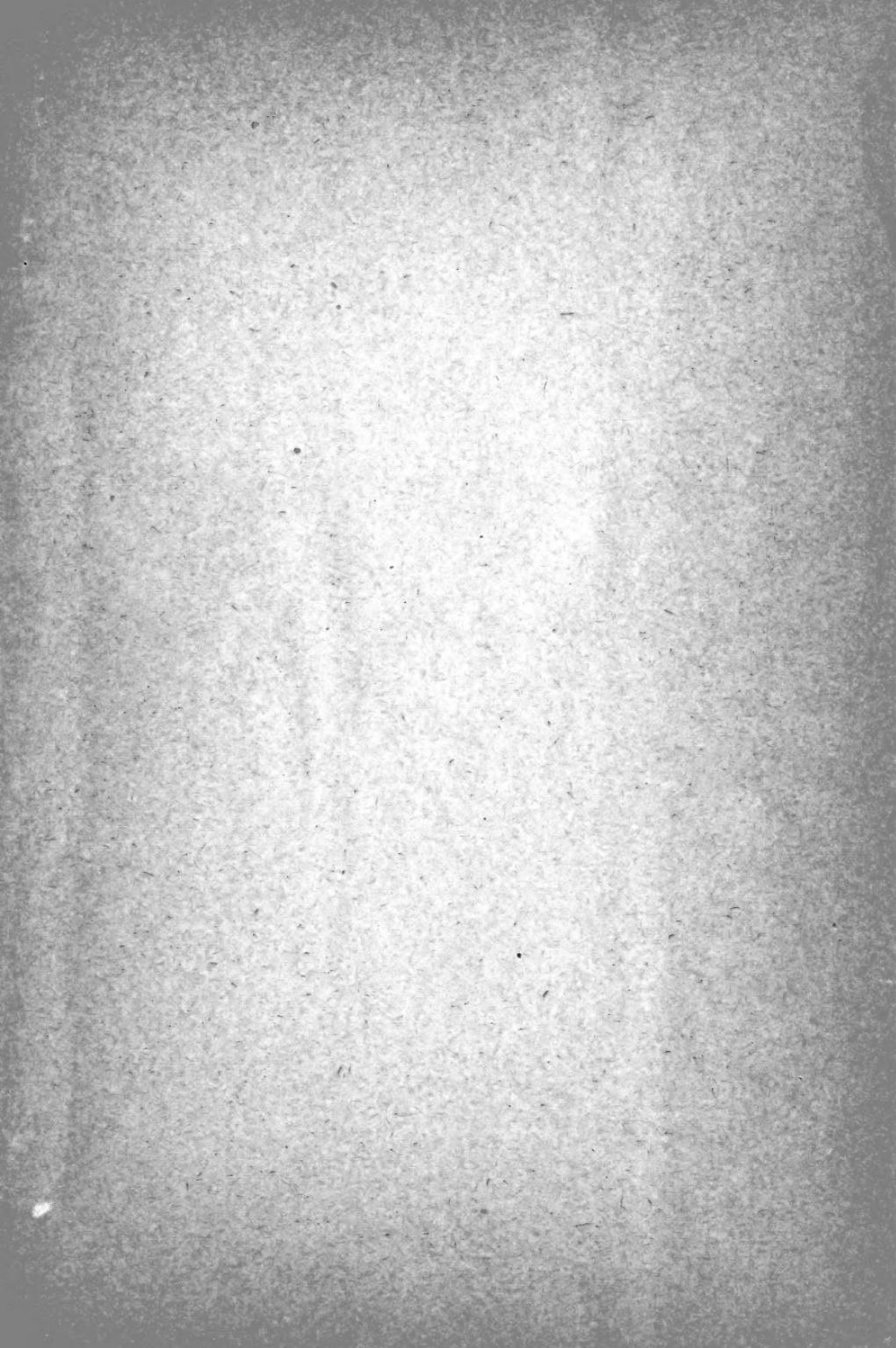
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THOS. J. MURRAY.

THE HORSE TRAINER.

A TREATISE

ON THE ORIGIN, CHARACTERISTICS, AND TRAINING

OF

HORSES;

WITH PRESCRIPTIONS FOR ORDINARY DISEASES.

ALSO

A SPECIAL DISCUSSION OF THE TRAINING OF

TROTTERS;

*15
9540*
WITH AN APPENDIX GIVEN TO THE

Training of Dogs for the Field,

AND THE SELECTION AND CARE OF COWS,

BY

THOMAS J. MURRAY.



AURORA, ILL.:
PRESS OF BUNNELL & WARD.
1888.

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Entered According to Act of Congress, in December, 1888,

By THOS. JEFFERSON MURRAY.

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THE HORSE TRAINER.

THE AUTHOR MAKES HIS BOW.

Books upon the horse abound, many of them apparently written on horseback. They are of two classes. One is learned, elaborate and expensive; usually written in technical language, above the range of the people needing the information. The other is prepared by men of little scientific knowledge of the horse, or of anything else. The object is to bring out some pet theory, or to champion a medicine, or to sell a book full of talks given first in the street and afterwards "published at the request of friends." The first class has too much learning to be of practical use, and the second, too little.

The people who most need a book on horsemanship are the men who raise two or three colts a year, and who ought to do the "breaking" at home; or men who keep a few horses for their own use. These two classes comprise the bulk of the horse-owners of this country, and I have written chiefly for them. I have shown them, I think, how to give to their horses advanced values by increasing their capabilities and serviceableness and by prolonging their life.

I commend to the careful reader the results of my own practical studies among horses, during twenty-five years. My experience has been gained in training more than three thousand colts, and in treating over four hundred vicious horses. I believe my conclusions are clear and strong; they are given without pedantry or parade; and I hope the reader will follow my suggested lines of inquiry out into deeper studies, over broader fields.

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A FAIR TEST OF MY METHODS.

BREAKING UP ANY VICIOUS HABIT.

Until I rescind this notice in the Chicago *Horseman*, I will go, on call, to any place within 500 miles of Chicago and cure, free of charge, any horse of any vicious habit, on the following conditions:

The horse must have his five senses and must be of sound horse mind; the breaking up of the vicious habit in question must have been tried and given up by the local trainers; I must be entertained free of charge while it is necessary for me to remain; no charge will be made for the cure, but half of my traveling expenses must be paid or guaranteed in advance; the other half I will bear myself; if I fail to cure I will pay all the traveling expenses, both ways. Address the Author,

THOS. J. MURRAY,

SANDWICH, ILLINOIS.

November 20, 1888.

This book will be forwarded, post-paid, to any address on receipt of price, \$1.00. T. J. M.

TESTIMONIALS.

Ungovernable—Whirl Round and Run the Wrong Way.

SOMONAUK, ILL., Aug. 20, 1888.

I had a stallion in the year 1872, called Somonauk, that was four years old. He had a habit of turning round and starting after any team that he would meet in the road. In this habit he seemed ungovernable. After being in Mr. Murray's care a short time he was returned perfectly docile and manageable.

H. WRIGHT.

A Stubborn Kicker and Tail-Switcher—Unmanageable.

SANDWICH, ILL., Aug. 20, 1888.

In 1887 I undertook to break a fine mare colt when she was three years old. She proved a stubborn kicker and tail-switcher, so as to be unmanageable by me. After Mr. T. J. Murray had her in training about three weeks she was returned to me a quiet, docile worker, without any bad habits, and so she continues in any kind of work on the farm.

C. P. COY.

He Would go Where he Pleased.

SANDWICH, ILL., Aug. 10, 1888.

Early in 1888 I traded for a three-year-old colt that I supposed was broken, but he was unmanageable in the harness. He would go where he pleased. After he had been in Mr. T. J. Murray's hands about one week he was brought back, fit for the cart or the buggy or any other kind of work. He has never since betrayed any kind of bad habit.

AVERY CONE.

A Hard Kicker in the Harness.

PLANO, ILL., Aug. 20, 1888.

About one year ago I had a three-year-old mare colt of so bad a disposition, and so apt to kick, that for the breaking I took her to Mr. T. J. Murray. From the first she was a hard kicker in the harness and a tail-switcher. After about a month he brought her back as quiet and tractable a farm horse as any in this country. I was so well pleased that I freely paid double the price asked for the training.

ALFRED DARNELL.

Spirited—Unmanageable—Made Perfectly Gentle.

SANDWICH, ILL., Aug. 20, 1888.

I had, in 1883, a spirited mare five years old that had been hitched up once or twice, but she was so wild as to make it very doubtful whether she could be made manageable at all. After she had been in the hands of Mr. T. J. Murray, of this place, she came back perfectly gentle, so that ever since a lady can drive her anywhere. With this one, and with others, I know that Mr. Murray has had great success.

E. A. MANCHESTER.

Could Never be Made to Work.

SANDWICH, ILL., Aug. 10, 1888.

In the year of 1883 Mr. T. J. Murray trained for me a very unpromising three-year-old filly. She was of a mare that could never be made to work, and this was the only one of her progeny that ever submitted to the harness. Mr. Murray returned her to me perfectly docile and tractable, and I sold her soon after for \$175, to be used for a buggy horse for family driving. She has always since been a trustworthy worker, double or single.

STEPHEN ROGERS.

A Bad Balker—Useless Unless Cured—Fixed in the Bad Habit.

SANDWICH, ILL., Aug. 8, 1888.

This is to certify that I took to Mr. T. J. Murray a fine black colt, somewhat broken but only to be made, as it seemed, incurably balky. He was well known as a very bad balker and he was utterly worthless unless cured. He was firmly fixed in the bad habit. Mr. Murray kept him about six weeks, after which he worked right along and has never given trouble since. Soon after I got him back I sold him to Mr. Edward Thompson, of Sandwich, for a family horse for \$185. He was afterwards sold to Mr. Henry A. Adams, of the Sandwich Manufacturing Company, and used as a fine family horse.

GEORGE MASON.

Col. Winchester's Eight Colts.

SANDWICH, ILL., Aug. 10, 1888.

I have been acquainted with Mr. T. J. Murray's method with colts and vicious horses for twenty-five years, and I was so certain that he would find an animal that was more than a match for him that I have kept an eye on his work. I have put in his training, at various times, eight colts of mine, because I saw that he was the master of his business. Several of them were trotters, and were nervous and hard to manage. Mr. Murray made a complete success with them all.

H. F. WINCHESTER.

Runaway Mustang Mules—Become Well Mannered.

SANDWICH, ILL, Sep. 20, 1888.

I am now driving a pair of mustang mules that were shipped here from Texas. At first they had to be tied and firmly held while being harnessed or hitched to the wagon, and when let go they would shoot away at full speed for three or five miles before they could be reined up. They were driven by several good drivers but they always had their own way. Finally I put them in Mr. Murray's hands, and after he had done the harnessing and driving in his own way, for about two weeks, they became good, quiet, tractable, well-mannered mules.

P. S. FAIRBANKS.

A High Tempered Colt—Trained, and Sold for \$1100.

KINGSTON, N. Y., July 30, 1888.

To Whom it may Concern:

In 1883-4, Mr. T. J. Murray, of Sandwich, Illinois, broke and trained for me two high tempered colts. He was very successful with them and they became quiet, steady horses. After about four weeks handling I sold one of them for a family horse, and the other has since been sold for eleven hundred dollars, for a road horse. I cheerfully and very highly commend Mr. Murray's methods of handling horses.

EDWARD T. STELLE.

Formerly of Chicago, now of Kingston, New York.

Unmanageable Stallion—Kicked Furiously in Harness—Escaped from Keeper—a Biting, Kicking Terror.

SANDWICH, ILL., Aug. 14, 1888.

I had a stallion, in the year 1878, that had been raised by my son, that was always unmanageable until he was trained by Mr. T. J. Murray of this place. When he was two years old my boys could do nothing with him. They could not even take him out of the stable. When he was first put in harness he kicked furiously and broke a man's leg. When he was three years old he was put in charge of an experienced keeper from whom he escaped and was retaken with difficulty. When Mr. Murray took him he would bite and kick and he was the terror of all who knew him. Mr. Murray had him in hand about three weeks, after which he was perfectly controllable, and he never afterwards gave his keepers any trouble.

ENOCH DARNELLI.

SANDWICH, ILL., Sept. 20, 1888.

Mr. T. J. Murray and myself have been neighbors from our boyhood; for many years he has driven his colts in training past my house, and I know his methods well. As the best man for the business, I have put under his management, at various times, six colts, all fine bred, and valuable animals. One was nervous and high tempered, and one was a bad kicker. All of them came out alike; good, quiet, tractable drivers.

H. HENNIS.

Every Coltish Vice—Wild, Nervous and a Natural Kicker.

CHICAGO, Aug. 2, 1888.

To Whom it may Concern:

In 1882 Mr. T. J. Murray, of Sandwich, Illinois, trained a colt for me that had almost every coltish vice, which he inherited. He was wild, nervous and a natural kicker and exceedingly headstrong. He had never been hitched to any vehicle when Mr. Murray took him. He was returned to me, after three months, a good, quiet, safe driver. I drove him single and double about the city and boulevards for a long time with my family.

I consider Mr. Murray an excellent man to break vicious colts and horses and make them quiet and gentle. He is careful and even tempered.

IRUS COY.

PART FIRST.

WHERE LIVED THE FIRST HORSE?

CHAPTER I.

THE ORIGIN OF THE HORSE.

The horse has a respectable standing in the scanty records of pre-historic times. A horse with three toes, and a hoof on each toe, walked about in the hardening clay of the Chalk period, ages and ages ago. The present single-hoofed animal cannot be traced, with any certainty, to the three-toed horse whose fossilized feet are found both in Europe and America. As far as any records in the rocks are yet known, the horse of three separate toes, with a hoof on each one, went suddenly out of existence. The next record reveals a fossil horse that lived in the time of the mastodon, the exact horse of our own times. Our horse has but one hoof, and yet, as if he worked under a royalty from his three-hoofed and extinct ancestor, he has under the skin, just below the ankle-joint, a little incipient toe. Who will tell us whether this budding toe is a record of what our horse once possessed or a prediction that he will some day sprout additional toes? One thing is certain, there are skeletons of the fossil horse that seems to be

the direct ancestor of our present horse.

Julius Cæsar found in Britain a horse among the natives that was so inferior to the noble animals ridden by his cavalry that the native breed was at once improved by crossing. The Romans also carried their fine horses into Spain where the mixed blood, under the fine climate, gained rather than lost. When William of Normandy entered England, in 1066, his splendid horse was of Spanish blood. The Moors also carried into Spain the showy Barbs, and this upon the old Roman stock made the best civil and military horse of Europe. The Turkish horse is directly related to the Arabian. The Germans and French have selected the best bloods of all the old countries, and for military work they are second only to the English. England surpasses Arabia in the quickness, speed and endurance of her horses. The Persian horse is a son of Arabia, with finer form, but he is less fleet. This horse came to England in the time of Elizabeth. James I. and Charles I. and II., all patrons of the turf, imported horses from Arabia, Turkey and Morocco. From so many fountains have come the beauty and power of the British horse.

It is a little remarkable, that while the later geological formation of both the Americas abounds with the fossil bones of the true modern horse, yet there did not exist on this continent a living horse when America was discovered, in 1492. The Mustang of Mexico, the wild horse of South America and that of Australia can all be traced to European introduction.

There are also found in Europe bones and rude but graphic outlines, carved on antlers and on stones,

which depict a smaller horse than ours, of heavy build, with large heads and shaggy manes and tails, much resembling the wild horse of southern Russia. It is not likely that the present horse of Europe has come from a native European ancestry. It is more likely that Asia, which was the cradle of the human race, preserved the horse in his beauty and usefulness from the earliest times. The war horse described by Job, who wrote before the days of Abraham, was quite the equal of Rienzi the charger ridden by Sheridan at Winchester. The light of civilization, which never was withdrawn from all parts of the earth at the same time, has always revealed the horse as we know him, toiling in the service of man. He probably entered Europe through Greece. He has been a powerful factor in every form of advanced civilization in all times, in both peace and war. It is due to climate and intelligent selection that in the varieties of horse there are such marked peculiarities as make the differences between the Shetland pony, the modern trotter and the London dray-horse.

The handsomest horse in the world is the Arabian. No other is so nearly perfect. There is no fine family of horses now living but that is tinged with Arabian blood. The Arabian horse at home is scantily fed and is unstabled, except as he shares the same roof with the family, but his royal blood contributes beauty or speed to every race track of Europe and America.

CHAPTER II.

HORSE EDUCATION.

In some countries to this day the people do not believe in educating boys. Instinct and painful experience they think will give them all the learning that boys need. In like manner many people who educate their children do not believe in the education of colts. If the colt is taught any thing at all it is at the rough hands of the hired man. The horse is not allowed any credit for horse intelligence, for judgment, or sensitiveness, or gratitude ; and it is an accident if he is not made balky, vicious or a regular runaway, or else lazy, stupid and uneven in temper and gait.

Not every boy will repay the expense of a fine education ; it may only serve to put a label on his incompetency. He may belong to a race of giant minds among whom a dunce is as rare as a cyclone, but you cannot cipher up his good points with a tape measure. His speed and endurance, his strength and docility cannot be gauged till after expensive and toilsome years on the race courses of life. But the colt does not finish his first year till it is legible all over him, to any one who can read the colt language, exactly in what kind of work for man he can excel and to what school he had better be sent. Some fine colts are equal to only the common school of the plow-horse, others will do credit to the academy for horses and will shine as the general utility horse, useful, gay and dashing,

anywhere. The horse college turns out the trained and intelligent graduate that can do more sharp things than his governor can ; he will understand a tone or look, or whatever his master says to him ; he can play tricks on his groom and escape work when he wants to rest. The university horse begins with fine blood. His form and style are not made, but born ; his lineage links him to such kings of his kind as were carried by the Queen of Sheba to King Solomon. He would pass on five points of examination ; he is of purest blood, of large and lustrous eye, of thin and sensitive nostrils, of faultless form and unconquerable spirit, and of a capability of learning that has been sharpened by ages of refining cultivation. There is no mistaking him. He prances before the imperial carriage, or bears the commander-in-chief among bursting shells and whizzing balls ; or he is degraded to draw a beer wagon, but his bearing is so noble, his inherited gentility so evident, as to say, "My education was worthy of my birth and I deserve honor of all who know a well-bred horse when they see him."

The art of the horse trainer seeks to make the most of the raw material offered him. No one can say that the limit of the improbability of the horse has been reached. The education of a horse in the cavalry line of service is not undertaken as an object at all, but the horse comes to know his duty and to know the meaning of military music, so that without a rider he will form in line, or make a charge. Professor Bartholomew's twenty-one performing horses obey five hundred different commands, comprising two thousand different words. The colt is not often left

at school long enough to be educated to the top of his capability. Much depends upon the way his owner puts him through his paces for the next year or two after leaving school.

CHAPTER III.

A WORD TO OWNERS OF COLTS.

Keep on good terms with your colt ; he will feed better; he will have a better character. Do not make him live at the end of a long lash, nor as far away as you can throw a club. Let him increase the number of his human friends as rapidly as possible and attach himself to them, so that he will leave his animal associates to go to them. Do not send a colt to school or to work when he is under the weather. How would it do to take a man out of the hospital and put him on the road ? A little care and quiet rest may save a horse's life and also a veterinary's bill. Do not wait for him to talk ; you can learn that he is sick as easily as he can that you are out of temper.

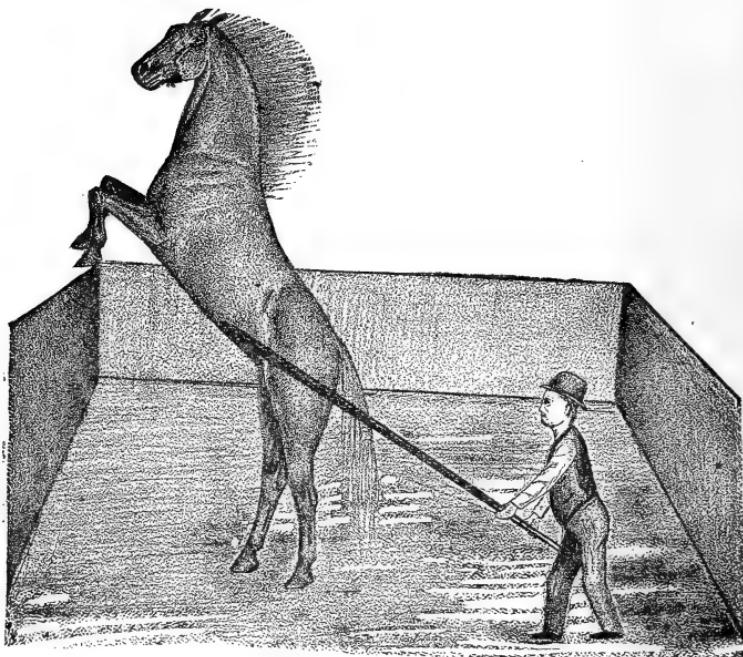
Many a colt is timid by inheritance. It is not a fault, but a misfortune, and it should not be whipped out, but treated out. It is not in his will but in his over-delicate nerves. You will lose time by becoming angry with him. Anger teaches nothing good to anybody. Suppress your angry tones and cruel strokes. Do not send his hot blood from his heart to his head to deluge his sensitive brain, driving him to frenzy, or blinding him with fear. First make him understand what you want him to do. Kind words and caressing touches will improve both his mind and temper. You will never fail in this way unless you delay the beginning too long.

When he tells you that he is afraid of the harness, or of a covered carriage, or an upturned load of hay, depend upon it this is not an affectation, it is a serious business with him. The trouble is in his mind, not in his body. Flogging will not remove it. You must find a way of convincing him that he was mistaken as to the danger. Unless his mind can be changed about his aversions he will always be an uncertain, if not a dangerous, horse. His old fear, uncorrected, may seize him any time. Convince him that he was wrong and then you have him.

A colt is always more valuable for not needing to be broken. When he is old enough to set up in business for himself he ought to know the horse alphabet well. The halter, the bit, the harness, the words that mean "come," "go on," "stop," "back," and the feeling of pleasure under the owner's hand, should all be familiar to him from colt-hood up. One whose education is begun so early will be sure to develop a good character. He will never be balky, or scary; nor will he be a biter, or kicker, a runaway nor a fence-jumper.

Most of what we call vices in the horse-character originate in his instinct of self-defense or self-preservation. When he uses his teeth or his heels, or becomes unmanageable from fright, he is resorting to the only means he knows of for defending himself. As soon as he learns that no harm will come to him while his master is obeyed, and that his efforts to take care of himself only injure him, he will reform. The highest art of the trainer is to preserve all the original spirit of the noble animal and to convince him that his owner is

his best friend. He will then be a much better and more valuable horse than that other one that was subdued into a broken spirited horse after he had become a strong, full-grown colt.



NO. 1.—CATCHING THE COLT IN A BOX STALL.

PART SECOND.

PRACTICAL HORSE TRAINING.

CHAPTER IV.

HOW TO HALTER AND LEAD A COLT.

First drive the colt into a box stall, a paddock, or a small enclosure, being sure that he cannot escape, or hurt himself by getting under, or over, the sides. Procure a blunt pole, eight or ten feet long, and begin by touching slightly, anywhere about his body, his neck and head, until he becomes quite used to it. At first he may appear shy, or even become excited, but by keeping at him, and not hurting nor needlessly alarming him, you will soon be able to lay your hand on his neck and head. The great fear a colt has is the touch of a man's hand ; but the most sensitive will, with the use of the pole, become quiet and will allow the touch of the hand upon the body or on the head or neck.

If he is vicious and inclines to kick, use the pole vigorously at the flanks, and when he grows quiet, walk up to him and pat him on the neck and head, speaking kindly to him until he understands that he is not going to be hurt. Then proceed by taking the Eclipse halter in the left hand, letting the colt smell of it, and placing it against him and over him, till it does



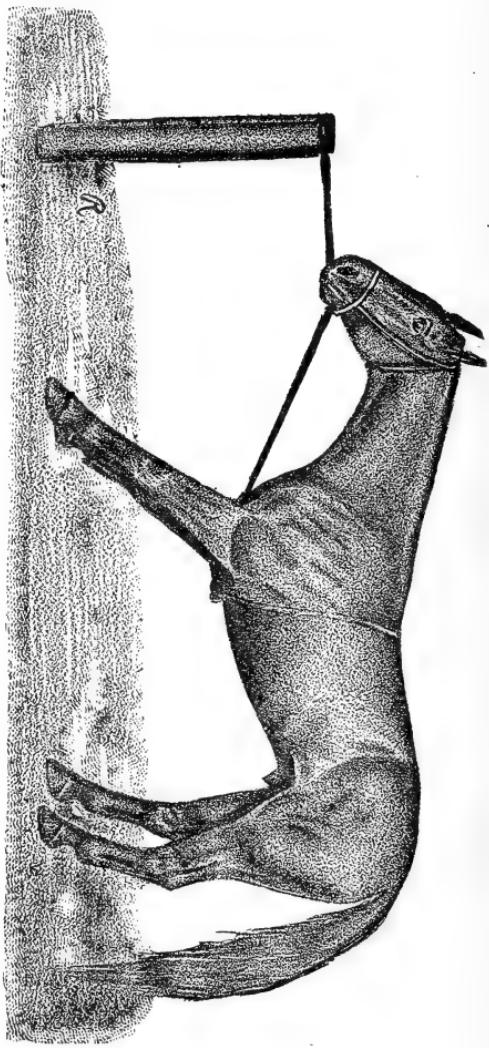
NO. 2.—TEACHING A COLT TO LEAD.

not disturb him. Then buckle the strap gently about his neck and slip the rope over his nose. This style of halter has great advantages over the old style war-bridle, as it prevents the tearing of the animal's mouth. Sometimes a horse never recovers from the effects of the misuse of his mouth by a mouth-halter of the old style.

The colt being haltered, the next step is to teach him to lead. Always keep your colt as good natured as possible and do not allow him to grow sullen. Step away from the colt eight or ten feet, not directly in front of him but at a right angle from him, opposite his shoulder. Never try to lead him ahead till he understands the side pulls. Give him now a slight pull on the rope, saying, "Come here," and then allow the rope to fall slack. If he turns his head towards you pat him on the neck and talk kindly to him, but if he draws back or turns away, give a vigorous jerk on the rope. Keep at him on one side until he comes to you, and then try him on the other side. In fifteen or twenty minutes he will follow you about.

This will suffice for this lesson and he may be put in the barn and hitched in the following manner :

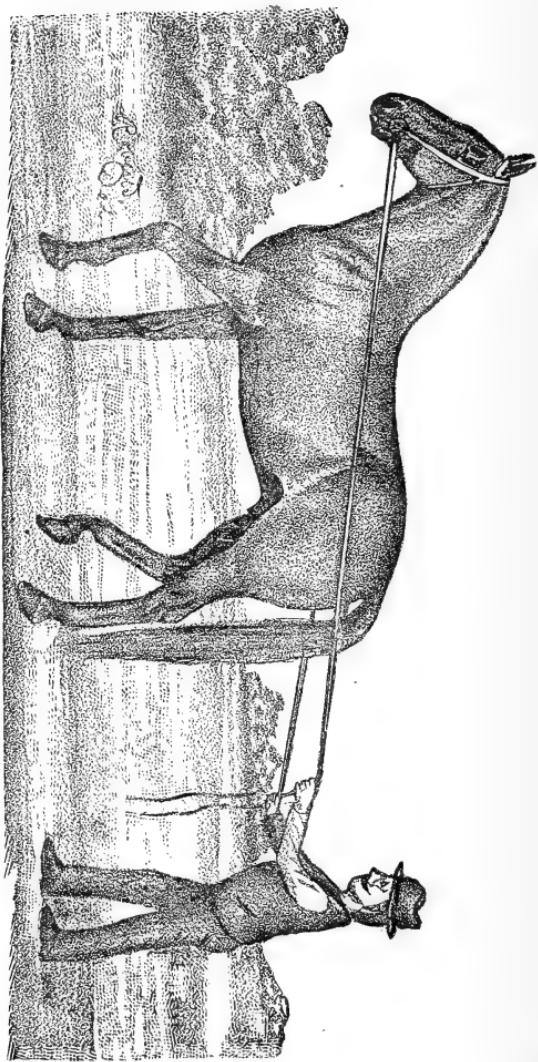
Take a five-eighths inch rope about twenty feet long and tie one end around his body just back of his shoulders. Do not tie the rope so that it can slip, but use a square knot, as the slip knot may prove damaging to a hard puller. Pass the other end of the rope between his front legs, through the chin piece of his halter, and tie to the manger. In using this rope a five-ringed halter must be used, instead of the first one put on.



NO. 3.—TO PREVENT THE COLT FROM BREAKING THE HALTER.

Now that you have him securely fastened, shake something in front of his eyes, or in some way induce him to make the experiment of pulling back. A horse, in pulling back, throws his head high in the air. With this contrivance that is prevented, as it keeps his head on the level with his shoulders and the manger, so that he has no brace for a stong pull.

A halter puller, or a bridle breaker, hitched in this way, will soon give up the habit. When pulling on the halter is corrected by making him draw on a rope placed under his tail, he is liable to injury and he may be disfigured, and it may make him sensitive for the rest of his life about the use of the crupper. This method prevents a horse from shaking his head while pulling and by it he cannot bruise his head or injure his eyes. This is the safest and best way of hitching colts and halter breakers, and from long experience I strongly recommend it for that purpose.



NO. 4.—BITTING THE COLT.

CHAPTER V.

HOW TO BIT A COLT.

Place upon him a common blind bridle with long lines and lead him into some vacant field where you will have plenty of room. Throw one line on the opposite side of the colt and step back and draw gently on the inner line until he circles around you. When he will do this satisfactorily throw the inner line over and make him go in the reverse direction. If he tries to jump, or run away, drop one line and draw him to you with the other one. Once in a while a colt will be found that cannot be controlled by any simple method like this. He will want a surcingle and foot ropes. See cut on page 36.

Nothing can be done with two lines when he begins to plunge or kick. Quiet the colt and go through the same process until he circles around you nicely, both ways. Now start him straight ahead, teaching him at the word, "Get up," to start, and to stop at the word, "Whoa." Drive him up to anything that you think might frighten him and never let him leave anything that he is afraid of until he goes up to it and finds out that it will not harm him. Let him see it on all sides and let him smell of it. Have him understand it till he will remain quietly beside it. If he seems really afraid of it go up to it yourself and let him see you touch it. He will have need to be practiced with the bit in this way for three or four days till he turns readily by the line

to the right or left. Do not be in a hurry to set him to drawing anything. He will learn more readily in these first lessons than afterwards. While he is learning the use of the bit you will succeed better in getting scariness out of him than in any other way.

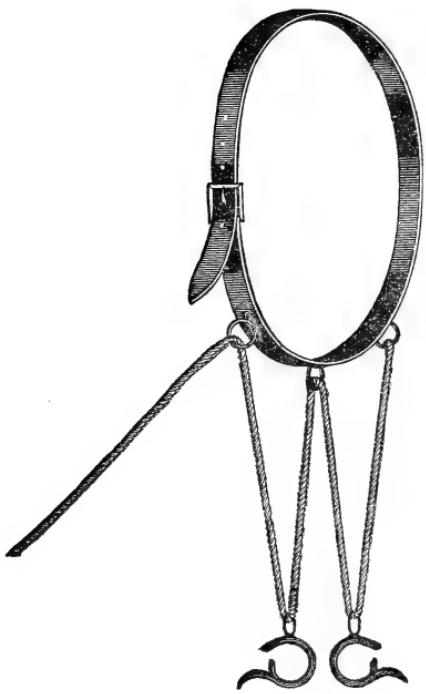
CHAPTER VI.

THE SAFETY SURCINGLE AND FOOT STRAPS. •

This surcingle is so important in the controlling of a colt, otherwise unmanageable, that its description is placed here. It is necessary in controlling any colt that is fretful, vicious, a kicker, a runaway, or a balker. If there is any thing else that comes of willfulness or stubbornness this instrument is the simplest thing with which to secure obedience ; and it is at the same time the most direct, and the least harmful to the animal.

This surcingle is made of a strap of heavy leather, six and a half feet in length and one and a half inches in width, and it is doubled from the buckle to the third ring. This is the size of surcingle that I use but it may be as much wider as you chose, although I have yet to see the horse that one of these dimensions will not hold. Use an inch and a half buckle, and have holes enough cut in the strap so that it can be readily put on a small or a large horse. Put on it three rings one and a half inches in diameter. Fasten one about eight inches from the buckle, placing it lengthwise with the strap. Place the next one six inches from the first, fixing it crosswise on the strap, and then put the third one, lengthwise, six inches from the second.

This is the kind of surcingle always alluded to in connection with the foot straps, described below. It is not excelled by any invention for runaway or kick-



No. 5.—SURCINGLE AND FOOT STRAPS.

ing horses, and it should always be used in teaching a horse to become used to strange sights and sounds, such as umbrellas, bicycles, top carriages, loose papers, or discharge of fire arms, and it can always be used to good advantage on a fretful horse.

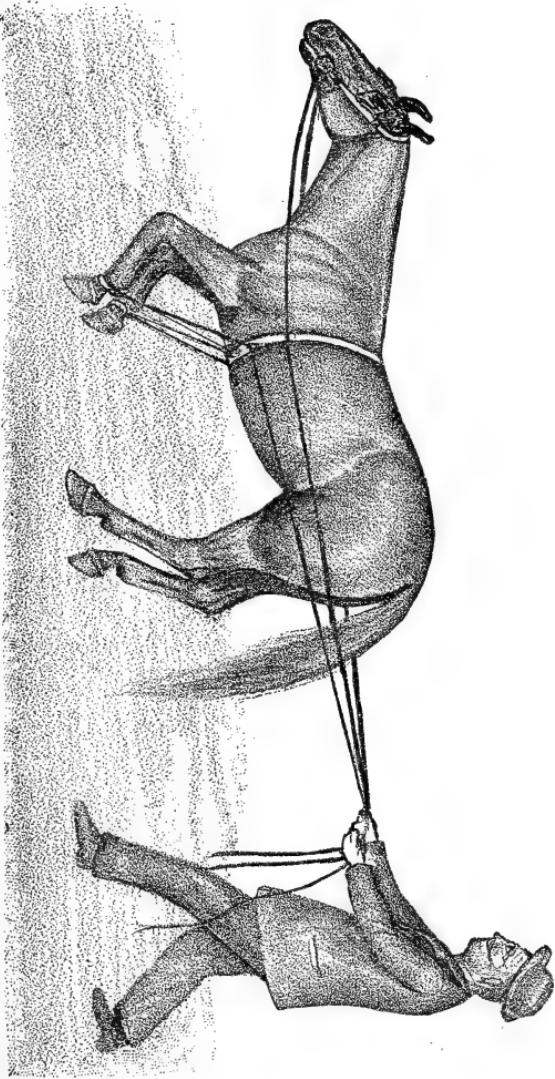
To make the foot straps, take a strap of leather sixteen inches in length and one and a half inches in width, and fasten on it an inch and a half ring, about two inches from the buckle, or one inch from the loop. To use this surcingle with the foot straps, first put on the surcingle with the rings underneath and then buckle on the foot straps.

Now take twenty-five feet of half-inch cotton rope and pass one end through the belt ring on the surcingle down through the ring on the left foot, then through the middle ring on the surcingle, through the ring on the right foot and tie it to the third ring on the surcingle. This is the method if you are driving double and the colt is on the off side, but if the colt is on the near side, commence to put on the rope from the right side, for in any event the rope should come between the horses.

No horse, unless he is perfectly gentle, should have his first lessons in the poles without the surcingle and foot straps.

This invention is just as useful for controlling cattle as for horses. When butchers bring an animal from the country it is very commonly done by two or three men on horseback, racing into every open field and garden; and so heating the blood and maddening the creature as to injure the beef. One man can, with the farmer's assistance, put the surcingle and foot straps

on the cow or ox and quietly drive the creature anywhere.



No. 6.—CONTROLLING COLT WITH SURCINGLE.

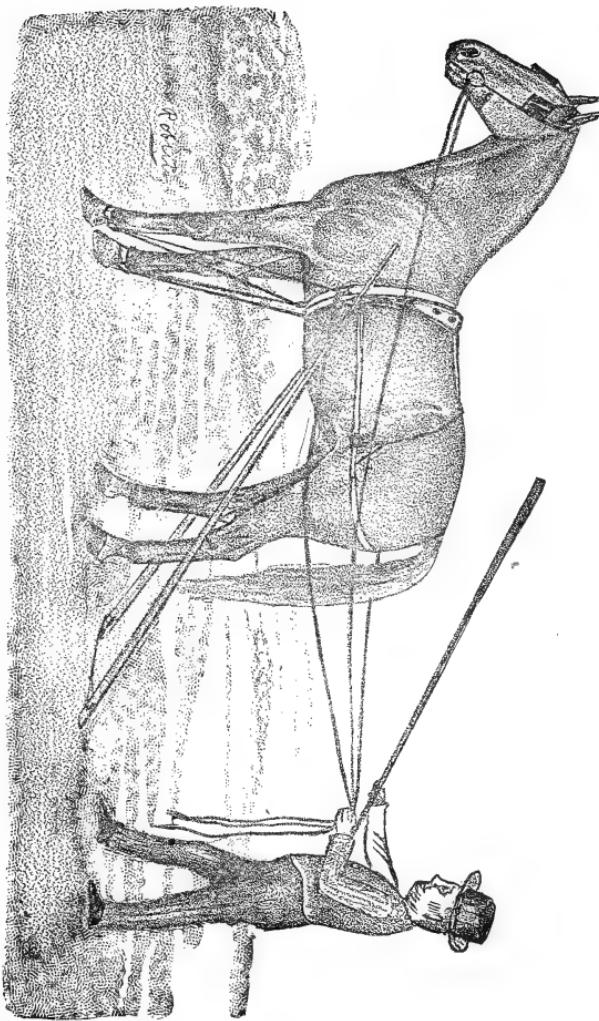
CHAPTER VII.

HOW TO HARNESS AND DRIVE A COLT.

In harnessing a colt, first see that the harness is perfectly safe, and see also that it fits well. Many accidents have occurred from an insecure or loose-fitting harness. Allow the colt to see it and to smell it freely. Then lay the harness gently on his back. Never be too hasty about throwing it on his back, but do so deliberately. When the harness is once on take it off again and put it on, doing so until the colt does not mind it.

When first driving a colt with the harness on, do not put the lines through the terret rings, or the thill straps, for if he should turn on you he would be liable to run away, as you would have no way of bringing him to you, because drawing on one line would perhaps tangle him up, and you would eventually be obliged to drop the line.

Now, after he is accustomed to the harness, and understands when to start and to stop, he is ready to be hitched to the cart or poles. The poles are made of hickory, or any tough wood, nine and a half feet in length and two and a half inches in diameter, at the large ends. Put the small end of the poles through the thill straps, and pass the thill girth through the thill straps; and also through the staples in the poles sixteen inches from the front ends, and buckle tight. If the colt is wild, or nervous, use the safety surcingle. (See cut on opposite page.)



No. 7.—Colt Hitched to the Poles.

If you wish to drive the colt double, hitch him on the off, or right hand side, as it will be more convenient in getting in and out of the wagon on the side next to the gentle horse. Be sure to make the old horse stop when you stop the colt. Have the rope so that it will come between the two horses. In driving single, have the rope in the left hand and the lines in the right. Give the colt a loose rein to start off with, and if he starts to run, or jump, pull the rope carefully. Do not throw him to his knees only as a last resort, and never allow the colt to run before you throw, for if he is thrown while running on a hard road he might be injured. Always, on starting out, drive the colt at a walk, as it will quiet his spirits, and it is no trouble to teach him to trot after you have him in the habit of regular movement. Keep the surcingle on him for three or four times, as it is better to use it once too often than not enough.

CHAPTER VIII.

HOW TO HANDLE A FRETFUL HORSE.

Fretfulness originates in unusual sensitiveness of nerves, but it is often cultivated by carelessness in first handling. The owner, or the trainer, has failed to give the time needed for his delicate work, or he has fretted himself and has so started the habit in the colt. If you are cool and patient and give as much time as you ought you may do much to prevent the habit, or you may rescue him from it. If he is already fretful, hitch him on the cart after he has been practiced with the surcingle and the ropes, and obeys them well, letting him know that you have perfect control of his feet. Use a straight bar bit, and be very careful not to hurt his mouth. It will not do to let him get angry or excited. Start him slowly and if he begins to trot let him go for a short distance and then draw on the rope, at the same time pull on the lines, and steady him with soothing words. Do not take his feet away under any circumstances, unless you are absolutely compelled to, as it may make him more excited and wild than ever. When he starts into a trot draw gently on the lines and the ropes, talking to him soothingly till he gets into a walk. If he will trot again let him for a little and check him up easily and he will soon be as willing to walk as to trot.

After you have slowed him down let him walk again and repeat the process until he will obey the lines

without your having to draw up on the foot ropes. Do not be easily discouraged if the horse does not readily learn. It sometimes takes from three to four weeks to train one of a fretful habit.

CHAPTER IX.

HOW TO HANDLE A KICKER.

You will find, as a rule, that quite a large proportion of the mare colts are inclined to kick. This is one of the habits that cannot be coaxed out of a colt, but it usually requires severe treatment for some time. Hitch the kicking animal to the poles, first seeing that the surcingle is secure. After you have taught him that you can perfectly control him by this means, drive the colt ahead, and, at short intervals, turn him quickly to the right, or, so that the pole will strike him on the legs. When he is about to kick, which you can tell by watching his head and ears, throw him to his knees and apply the whip smartly to his hind quarters. As soon as he is thrown, slacken the rope so that he can rise to his feet immediately. Always give him his feet instantly. When he gets used to the touch of the poles, use the hand pole by touching him on the legs and body, to test him thoroughly, and throwing him every time he makes a movement to kick. It will not be long till he will entirely get out of the kicking habit.

For single driving, till all sensitiveness is certainly past, use a kicking strap, which passes over the hips and fastens securely to the shafts on each side. Even if the colt seems to have entirely given up the habit of kicking, great care must still be taken till the owner is satisfied that there is no danger of its recurrence.

Avoid all causes that may excite the heels. Let no part of the harness or the whiffle-tree come near them. Gradually, in the stable, he can be familiarized with the touch of the hand and of a wisp of straw upon his legs, and then of the harness upon any part of his body.

As a general thing a colt that is a kicker is a tail-switcher. This habit can be broken at the same time. Procure a small rope from one to two feet long. Fasten one end of the rope to the end of the horse's tail and draw the tail over his back and fasten to back band of the harness. Now pass a surcingle around his flanks and over the tail, directly forward of the stifle, drawing it tight as possible. Great care must be taken, for, if he ever will kick, his heels will be up now. Start him forward, using the whip frequently on his hind legs and bring him to his knees as often as he tries to kick. After having the tail in this position for an hour it should be released. Care must be taken not to leave it tied in this manner more than an hour, as it will be seen that when the tail is freed it will hang limp and motionless for some time. Three or four lessons of this sort will cure the worst tail-switcher. I have broken up the habit of kicking in a great many horses and I have never yet left one that was not broken entirely of tail-switching.

In 1883 Mr. Thomas Canham brought me a young mare that he was unable to hitch double on account of her kicking. He said he wanted her broken if it would not cost more than she was worth. She was a very bad kicker. This was not difficult to cure, but she was a very bad tail-switcher. I tied the tail back to the back band. The wriggling went on all the

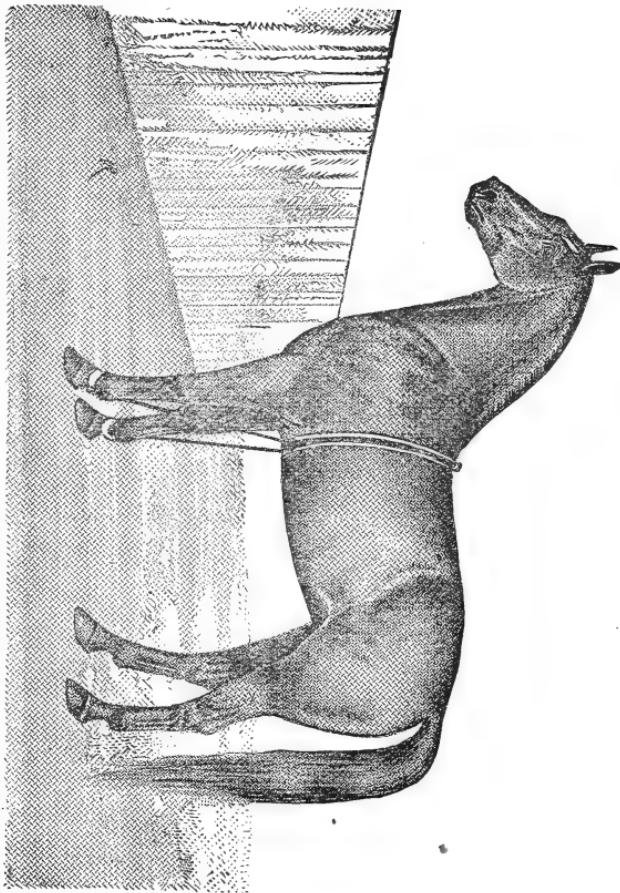


NO. 8.—TO PREVENT THE COLT FROM SWITCHING THE TAIL

same. She kicked the box stall to pieces, got out doors and kept on kicking there. Then I unbuckled the straps and put on the surcingle and foot ropes, and then put another surcingle around her as far back as the flanks would allow, holding the tail where it could not move. She was then completely controllable, and soon gave up this unpleasant trick. I returned her cured and quiet in three weeks. When the tail is so tied up, it is indispensable to use the surcingle and foot ropes, as otherwise the work is useless. This is a severe method on the animal, but the lesson may be for an hour or so only, and the process is effectual. Repeat the lesson till it is learned.

The line falling under the tail, often causes a horse to kick, when danger always follows, and sometimes damage. What begins the trouble is suddenly and sharply pulling the line out from under the tail. A few raspings in this way may fix an ugly and dangerous habit. Begin with the colt, and leave a strap under the tail as long as he chooses to hold it. Let him often have the line under his tail and do not pull it away. Wait till the pressure slackens and then draw it out, or let it drop away. Only a few days are necessary to cure the sensitiveness of the animal about the line getting under the tail, but it can only be done by judicious and gentle treatment. The tail of a horse should be handled as gently as his head. When you adjust the crupper the tail must not be used roughly nor be rudely let fall when you are done.

NO. 9.—TO PREVENT A HORSE FROM JUMPING THE FENCE.



CHAPTER X.

TO PREVENT FENCE-JUMPING.

Place the surcingle around his body with a ring directly behind each forward leg and a ring on his back. Put a strap, with a ring on it, around the fetlock of each front foot. Fasten a rope or strap to the ring on one of his feet,—say the left foot,—pass it through the lower ring on the same side and through the ring over his back, and then through the ring on the opposite side. Draw the rope or strap moderately tight. This gives the horse freedom in walking or trotting, but will prevent all efforts at running or jumping.

A horse is hardly accountable for the habit of jumping fences. The fence was poor to begin with, or the boys taught him to jump for the fun of it, or he followed the older horses that should have been broken of the habit long before. But the habit is a great inconvenience, and it ought to be cured before another day.

CHAPTER XI.

TO CURE THE HABIT OF RUNNING AWAY.

In driving a runaway horse some severe bit must be used; the best here is the Rockwell, in connection with the surcingle and the ropes. Take him into the yard and at every start pull on the lines and also throw him to his knees. At the same time use the word "Whoa." And here notice that you should never use the word "Whoa" to the horse unless you want him to stop at once. After a short time you will find he will obey the slightest pull on the lines. In driving him, if he starts to run, let him go for a short distance, and then, if he does not heed the lines, draw gradually on the foot ropes, thereby impeding his progress greatly, as it does not give him free control of his limbs, and in this way diverting his attention from his running. Then let him run several times and repeat and he will soon find that you have perfect control of him.

Smaller towns and country roads are often made lively by the running away of teams. In the wagon or carriage there are often women and children. They are unable to help themselves, and they are often taken up injured or killed. No man who handles horses should allow such things to occur. There is no need for it. The driver of a horse should inform himself as to the civilization of his horse, and he should not risk the lives of the helpless portion of his family. With proper training any ordinary horse can

be made safe enough for a woman to drive him. One horse may need a certain kind of bit, another may need practicing under a firm and steady hand, but it is practically true that any horse can be made a safe driver. What shall we say of the man who by his carelessness or his penuriousness requires his wife and children to ride after a horse that every day endangers their lives? There is no need for it and one who is once fairly warned, as is the reader of this page, should be held responsible by public opinion. No horse properly trained will ever endanger a life, by running away.

After all a trained colt is much like a boy who has some good habits but that has not seen much of the world. He does not know everything nor is he proof against surprises. He is not equal to every emergency. It will be the safest to test the young horse well before putting the reins in the hands of a woman for driving. A lady's driving horse ought to be used in a livery for a year, or be driven daily for as long by a careful man before he ought to be called a lady's horse.

CHAPTER XII.

HOW TO RIDE A HORSE.

In describing this I will explain the manner in which to ride a Mustang, and after one has accomplished this he will be able to ride any horse, for the Mustang is the hardest of all horses to break to ride.

Place the saddle securely and use a bridle with long lines. Take him into the barn-yard and teach him to guide as you would in breaking a colt. Be very careful of the pony's mouth, as their mouths are very tender, and if they once become sore the animal grows ugly and unmanageable. After he begins to understand which way to turn and when to start and stop, put on the safety surcingle, described in chapter vi, the saddle in the meantime having been taken off and the long lines substituted for reins. Keep hold of the rope only and teach him that you can at any moment take his feet from under him.

If he is extremely wild keep him down, walk up to him and pat him on the head and different parts of his body. It is best with particularly wild horses to have one to hold the rope and the other to keep near the horse, patting him when he is down and trying as much as possible to quiet him. After he becomes sufficiently pacified, jump up against him and if he springs away or backs, take away his feet. Then hang upon one side and drop off again, repeating this until he shall allow you to mount him without drawing

back or kicking. If there are any reasons to believe that your colt has a very unruly spirit, take no chances with him. Advance slowly and surely. After you have taught him the use of the foot ropes and surcingle, with these and an open bridle upon him, let some alert rider mount him. You can stand in the center holding the rope that controls his feet. Then let him go around you, turn him and let him go in the opposite direction, then straight forward, let him trot, or even gallop a few steps. Do not let the rider use the bridle except very gently, as the use of the bit may exasperate him. A few lessons with the surcingle and foot ropes will suffice to break any horse or Mustang for riding. And no horse trained for the saddle, in this way, will ever be given to bucking or to any other vicious habit.

CHAPTER XIII.

KICKING IN THE STALL.

In the first place fasten a surcingle around him tightly. If he kicks with but one foot use the foot straps by placing one strap on the kicking foot and the other on the forward foot, directly in front of the former. Fasten a rope in one ring, passing it through the surcingle and tie to the other one, drawing it tight. In this way, every time he kicks he throws his forward foot from under himself. If he kicks with both feet, place the rope in the same manner, connecting all four of his feet. It will soon put an end to kicking. This remedy makes it impossible to continue the habit of kicking ; and a discontinued habit is soon forgotten. This method will also cure the horse of kicking at a person who enters the stable, or kicking at another horse. The animal should be tested well before being pronounced cured of the habit.

There are other methods that succeed by attracting the horse's attention to something else. For example : buckle a piece of elastic suspender around his hind leg above the knee. If he goes to kick this will compress the leg unpleasantly and it will so divert his attention that he will stop.



NO. 10.—THE ECLIPSE HALTER.

CHAPTER XIV.

THE ECLIPSE HALTER.

This halter is made of a strap of heavy leather, thirty-six inches long and one and a quarter inches in width. Two rings are used : the first is a one and a half-inch "D" ring and it is set upon the strap crosswise, six inches from the buckle. The other, a common ring, is placed lengthwise with the strap about one-half an inch from the first ring. The strap is doubled from the buckle to the second ring.

In fastening the rings in place, put two rivets between the rings and four on the outside of each.

For the ring which is placed lengthwise, a large rivet can be placed between the thicknesses of the leather for it to work upon, such as can be seen on all five-ringed halters.

Tie an end of a half-inch cotton rope, twenty feet long, to the "D" ring. Hold the buckle of the strap in the right hand, and pass the other end of the rope through the other ring from the right to the left hand. Buckle the strap on the colt so that the rings come under the neck and the buckle on the right side. Then place that part of the rope that is between the rings over his nose.

Held by this halter a horse will stand for quite a severe surgical operation, and also while being shod.

If a horse resists bridling, put on the Eclipse halter and give one or two quick, energetic jerks with it, and

then try and bridle him again. In a short time you will bridle him easily and without any trouble whatever.

WINNING THE COLT WITH GENTLENESS.

The *Horseman* gives the talk of a liveryman as to the treatment of a sensitive colt: "Many men imagine that when they know that the horse's head is a sort of rudder on his bow end and the lines are tiller ropes to steer him with, they are possessed of all necessary knowledge for driving and working him. Such is not the case, however. Some considerations of the animal's peculiar characteristics will be advantageous. He is naturally very desirous of doing to the best of his ability whatever he understands his master desires of him. But he is timid, disposed to be nervous and excitable, and when his nerves get the better of him his power of thinking and realizing what you want him to do becomes impaired temporarily. You should be able to see when he is so effected, and to distinguish the indications of that condition from those of vicious obstinacy or temper. It will do no good to whip him when he has an attack of the nerves. That will only make him worse. In fact that is the general effect of the whip. Soothe him, encourage him, speak placidly and kindly to him, let him see you and touch you with his nose as you do so, and he will soon be calm, intelligent and willing again."

CHAPTER XV.

THE BALKY HORSE.

There is much said about the cure of the balky horse. If a colt balks it is the result of a mistake in his training. It is possible also to injure and abuse an under-fed or over-burdened horse till he loses heart, and he is never true again. For the time being he can be cured of it, but if he is allowed to rest for a few days he will fall into the vice again. If it is deemed worth the while to cure him, for a few days work, try it. Put him alongside a steady, true horse. Take a half-inch rope about twenty-five feet long, and, in the middle, wind in and out, old cloth, to make, for two feet or so of length, a strong solid rope, about two inches or more in diameter. Place the middle of this enlarged part under his tail; cross the other two parts over his back and carry one through each of the rings on the harness that hold up the neck-yoke, before him. Then fasten the ends to the end of the tongue of the wagon. Have a stay chain behind the other horse. When fastening the rope be sure that the horses stand even. Then start them and they will both go. The balky horse must not be injured by the rope. It must be made so large as not to cut or bruise the skin. He will step up to his work and if he has no vacations, or holidays, in which to forget, he will never balk again. But let him rest, as in harvest, or in winter, and he balks again all the same.

If a colt in training develops the balking habit it is by some foolishness in his handling, and nothing but instant and severe measures will save him. Put him in single harness, in the poles. Make a whip with a strong stock eighteen inches in length, and for a lash take a harness tug split in two, about fifteen inches in length, tying or nailing the lash firmly to the stock. Then start him. If he goes, all right. If not, strike him over the face with the lash, avoiding the eyes. Strike on till he moves away. If he throws himself, keep on till he gets up, and goes on. Then if not inclined to stop himself, stop him soon, and after resting a little start him again.

After working with him at the poles in this way for a while, put him in a breaking cart and get in to drive. If he will not go at all, give him more of the same treatment, or, if he will only go when you are on the ground, and not when you are on the cart, apply the lash again till he will go. If he refuses to go when you are on the cart, but offers to go when he hears you get off, do not let him then, but give him more of the lash over the face and ears. Then, if he will go, let him, and you get on the cart. If he is struck on the body or on the legs he will stand and stubbornly resist, apparently not knowing that he is to move. But surprised and pained at the assault on his face, where he is so tender, he will make a start, and any start being made, he is likely to go on. Then if he stops again make a noise as if you were getting off the cart, and if he will go all right.

There can be no objection to the exhaustion of all milder measures before resorting to this. If any milder

method can be found, so much the better. There would be no need for this, if it were not for the mistakes of persons who have taught the vice of balking, instead of training to better habits. A horse is like a man, in preferring to be struck any where except in the face. One blow in the face counts for more than a hundred on the body or legs in scaring him out of anything. I rarely strike a horse. I never carry a whip except for the two bad habits of balking and kicking. In training a vice of any kind out of a horse it is not wise to give up till one succeeds. It may not be done in one day, nor in a week. Patient, reasonable work will surely succeed in the end.

It is not wise to become angry even if you have to beat him. If you allow yourself to become angry you are unfit for such work as training a horse.

I have hesitated about giving any experience in the use of the whip on a horse. What I say here must not be taken for license for any needless severity; not one unnecessary stroke. I have never had the slightest trouble in avoiding the balky habit in colts whose training I began myself. The severity is only necessary to correct the errors of men who were ignorant of their business.

CHAPTER XVI.

THE BOLTING HORSE.

A young horse is liable to form the habit of bolting down some lane, or bolting into the road to the barn, in spite of all his driver can do. If permitted to form this habit when young, he will take the street that leads home whenever he is so inclined. It is singular that he never bolts equally to both sides, but only to the one to which he first starts with the habit. He will not turn to either the right or left, according to the way in which he is going, but he will shoot down only to the right, or only to the left. It is a very inconvenient habit and may result in damage.

The most direct remedy, and always effectual, is to put on him the surcingle and ropes, and guide him past the bolting corner till he does not regard it. If he offers to turn, take him down with the ropes and let him know that he is powerless whenever he turns that way. Then-hitch him in the cart, with the ropes upon him, and drive him past the bolting corner, and let him lose his feet from under him unless he yields promptly to the lines. Touch him with the whip sharply to keep his attention to his restraints. He will not need more than three or four exercises like this till he gets entirely out of the habit of bolting.

CHAPTER XVII.

GAITING THE HORSE.

The horse has three natural movements of his limbs, viz :—walking, trotting and galloping. In the first he raises his feet very little above the ground ; in trotting a little more ; in galloping still higher. Any horse can be trained to have a walk smart, light and sure. The trot should be firm, quick, even paced and strong, the fore legs pushed rapidly by the hind ones. If trained properly the trotting horse will of himself carry his head high and keep his body straight, and steady. If the haunches rise and fall alternately, or if the crupper rocks from side to side, the horse is too weak for rapid motion. The gallop is the resort when the horse tries to make speed. This can be modified into a canter. Some horses also amble or pace. This is moving the fore and hind foot of one side and the fore and hind foot of the other side, alternately. This gait is less quick than the trot or gallop and appears to be fatiguing to the horse. While this gait is natural to some it can be acquired by almost any, under care. Of all motions, trotting is the hardest for the rider, but all can be modified. Ladies and invalids want the pace and canter, drivers want the trot. The gallop is of rare use in this country beyond the actual trial of speed, and some of the uses of the army.

The gait of the horse is defined and formed in the first few times that he walks away in the harness.

No doubt he feels awkward, for his movements prove it. If his gait is left to accident it will most likely be a bad one, and it will greatly lower his value and abate the comfort of his owner, or driver. The action of a horse's feet is just the same in a walk as in a trot, the only difference being that the motions in the latter are more quick. Then to make an easy, free, rapid, graceful trotter he must first be a good walker. He should be practiced with walking till his step is free, even, regular and strong. His walk should have a liteness in it which shows that every joint is free and that his movements are a pleasure to himself. He should be urged into a cheerful walk in which every motion he makes, bends and plays all his joints, as of the shoulders, knees and feet. When he has acquired this kind of a walk it can be quickened into a trot. This may be the supple, easy trot in which every muscle is in easy play, or it may be the rapid trot in which the horse gathers up all his strength and distributes it equally through all his joints. Which ever of these trots he enters upon he should be kept at it till he evidently acquires the habit of it. You may know that he is at his best, both in vigor and speed, when, with any urging, he springs into a gallop.

The tracks on the ground as left by a horse are always exactly alike as to position whether walking, trotting, or galloping and beginning at any one you count five to make what is called a stride.

There is no part of the trainer's work requiring more skill and attention than gaiting a colt. If it should take a month to get the colt to feel comfortable and easy in the harness and to move off with perfect

self-possession the result will pay well. The gait of the horse will oftener sell him than his style or color. If bad habits of movement are once saddled on him it is hard to break them up. Let the trainer have patience. Make him a good walker, free, easy, and strong. Give him time to form the habit of graceful walking and then quicken the step into a supple trot, then into a spirited trot. When this is done you have improved his appearance and doubled his value.

LESLIE E. MACLEOD, in Patent Office Report for 1887, says :

“ Rysdyk’s Hambletonian was far and away the greatest of all trotting progenitors. He founded a trotting family with which none can compare and to which none approach, and his blood, it is said, “ raised the trotting horse of America to the highest point of excellence. ”

CHAPTER XVIII.

A LADY ON HORSEBACK.

No other than a most finely trained saddle horse should be offered for her first few lessons on horseback. A lady's riding on horseback is not an art; it is the science of drawing willing obedience out of a well trained horse. The suggestions of this chapter are not for one who seeks an equestrian accomplishment, but for the help of a lady or a child just now learning to sit safely in a side-saddle. According as the person is a child or a large person so the saddle should be small or usual size, and it should be set a little back and be well fastened on. If she rides often it is best always to have the same horse, and the animal should be so tractable that the smallest flaxen twine would guide or hold him. When she goes to mount she should take with her a lump of sugar, or an apple, or a carrot, to give him, with many caressive touches and tones of kindness.

She will stand close to the horse and place her right hand on the pommel of the saddle, and with her left foot in the right hand of her attendant, she will rise naturally and gracefully to her seat in the centre of the saddle. The reins, evenly adjusted, will be put in her left hand with the palm down and the whip in her right ; the left knee will rest easily against the saddle, and the left foot in the stirrup with the heel lower than the toes, the left hand will rest on nothing and yet be

at rest, and the left elbow will be on a line from the shoulder to the hand that grasps the reins. The whip hand, the right, will be held to the front, not down, nor back, and if the horse needs the whip, a thing entirely unlikely, he must have it straight down the shoulder, remembering the saying that a good rider never needs it and a kind one never uses it. The riding habit must not be pinned under foot. Before starting she must sit up erect and keep that attitude; hold the reins securely but gently, and not hard, and they must not be used to help her keep her seat. She must study to acquire a graceful balance of person, that will not bound out of place by any movement of the horse.

Now, ready for a start, if the child or lady has a friend skillful in the side saddle and wise, she will repeat to the learner her parting advice : " Do not lean forward. Cultivate in the saddle the graceful attitudes of the parlor. Do not take a distant clasp of the bridle and then lean towards it. Keep the horse under the rider's will and control every instant. Turn him round corners. Urge him to do his best walking. The first exercise should only last an hour and have neither a trot nor a gallop. Be content to take the alphabet first. At leaving the saddle have a little reward ready for the horse, a lump of sugar, or an apple, or a carrot, and talk to him in kindly tones and with caressive touches of the hand on his neck and head and nose, which he will remember and repay in service. "

The first half hour at the next riding should be again a rapid walk with frequent turning of corners. This will teach the horse whose will it is that controls his

movements. Later the horse may trot. The trotting should fill lessons enough to acquire perfect ease and grace of posture. After this is done the horse may canter. Here will come back a tendency to lean forward, but it must not be allowed. If a horse is trained for a lady's riding at all he will, in a canter, throw his right foot first. The attitude on the saddle makes this the easiest for the rider. If he breaks in with the left foot first, stop him at once and start him again. The rider will soon learn to tell him by a twitch of the bridle how to put his best foot foremost. After being assured of her position, and she and the horse understand each other, she can change him from the left foot canter to the right without stopping him.

If the horse should rear, she is to somewhat loosen the reins, pass the whip to her left hand and double up her little fist and strike him with it between the ears. Show no fear. If he comes up again hit him again. If you turn round and go home he will rear next time when he wants to go home, but if you keep him down by strokes between his ears, and keep him going, he will most likely never rear again. At the same time you must be very sure that there is nothing the matter with the saddle. See to this well before starting.

It is a great mistake to dismount when the horse rears. Give him the reins so that he can go on if he will. A stroke no stronger than with a resolute lady's fist on top of his head is a stunner, and will generally bring him to terms. A gentleman and lady were riding in England when the horse reared and he told her to slip off. She did not, but struck the horse on the head. The horse came up again and she saw his

feet pawing above her head. The gentleman said, "Let yourself drop from the saddle, I always do." But she dealt the horse another blow that brought him down and he never needed another.

As to kicking, no horse can do this unless he is allowed to throw his head down. A horse generally gives notice when he is going to kick by the way he frisks his head and sets his ears. A gentle, steady pull on the reins will set his head too high to allow of any kicking.

A lady needs presence of mind and security of position if the horse should rear or kick. This fact shows the wisdom of the first suggestion to practice thoroughly in the first lessons. If any lady or child will study thoroughly these hints, and practice carefully, she will excel as a skillful and graceful equestrian.

CHAPTER XIX.

TEACHING A HORSE TRICKS.

The horse was never made for a juggler. It seems incongruous to teach tricks to an animal that is, in his nature, so honest and so serious. You can depend on his speed, and on his strength any time, but it is a fraud on him to ask him to help you to deceive anybody. All horse tricks depend chiefly on one fine quality that he usually displays viz: exact obedience. The cuteness of the trick never enters his head. He knows what it is to be obedient without knowing why, and he can learn to obey orders about almost anything. He can remember also where and when to expect his food. The one who teaches tricks to a horse first commands him, and then rewards him. It makes a horse seem to be wise when he appears to obey a command to do something that is cute for a horse. He seems to understand what you say to him, though really he does not. He is either blindly obeying your command, or else he remembers that the chance has come to get something good to eat. His feats in picking up gloves and pocket handkerchiefs, and even pulling triggers, originate in efforts to find oats or apples.

A new circus horse was once trained, on an emergency, for a show, with only four days of schooling. Boys who handle colts that belong to them, soon teach them to do things apparently wise, as for example, the boy will tell the colt to stretch out his feet and rest himself.

"Stretch" is the only word the colt remembers. After being often tapped gently on his forward heels and told to "stretch," and after getting a nice bite to eat, he comes to obey without being touched. By repeatedly asking his colt to shake hands, and at first pulling up the foot with a strap, and petting the colt, and giving him a few grains of corn or an apple every time, the boy will find that the colt will politely extend his foot when asked to shake hands. As the right foot is the only one ever touched or asked for, it will be the only foot offered: It makes a horse look very sociable and friendly to hold out his right foot for a salutation, and he is, just like his owner, liable to get credit for more intelligence than he possesses.

You can just as easily teach him to make a bow. Take a pin in your right hand, standing near enough to his breast to touch him. With the pin touch him lightly, like the pricking of a fly. Instinctively he throws the lower part of his head downwards, to relieve himself of the supposed fly. This must be accepted and rewarded at once as his bow, or as his reply of yes, whichever you may have asked for. This must be repeated till he will bring down his head for seeing your hand move towards him. Or, you may from the beginning give him the signal by raising your left hand. Any sign agreed upon between you and the horse will do.

Just as readily he can be taught to say no by pricking him with a pin in the withers. To drive away the supposed fly he shakes his head. Each attempted obedience must be rewarded with caresses or with some dainty bite. Before long he will shake his head

to say no, at each motion of your hand towards his withers, without feeling the pin. You can soon train your colt in these ways to stretch, to shake hands when you come to him, and make a bow to you as you begin to talk to him, and alternately to say yes and no in quite a conversation.

It is a little more difficult to teach a horse to lie down. It is always more easy to teach a colt to do this, for he is less suspicious, and he is easier to handle. The near fore leg is easily disabled by being tied or strapped up to the arm, then take a small strap and tie it around the right fore foot below the pastern. Then pulling quickly on the bridle, as he obeys it, you take up his right foot by pulling on the strap over his back. This carries him to his knees, where you hold him a little while, caressing him and talking kindly to him. If he offers to rise, draw promptly on the bridle and on the strap, and he will unwittingly obey you as you say, "Lie down, Sir." Hold him down a while, talking to him and caressing him, till he loses his aversion to the posture. This lesson must be repeated often. After a while the right hand strap only need be used, then he will surrender by only taking up his foot, and telling him what to do. Then with practice he will obey the word, afterwards he will obey a motion of the hand. This is a severe lesson. It puts the colt in unnatural attitudes, and it is tiresome to him, and it is complicated, but if the trainer is patient, and firm, and rewards the horse well with kind words and good things to eat, he will soon obey the order to lie down as readily as he does the call to his dinner.

A horse seems to do a cute thing when he sits up

like a dog and seems to enjoy it, with a long face, while everybody laughs. It is not a hard thing to teach him to do. You must first notice the natural manner of a horse getting square on his feet from the posture of lying on the ground. When he is half way up it is not hard to stop him and have him stand, the front end fully up, and the other not yet moved from the ground. When he is down in this posture take your place behind him, with the bridle reins in your hand and the foot of a strong man planted on his tail. As he will spring up and straighten his front legs out as you call out, "Sit up, Sir!" you tighten the rein suddenly and he will hold himself there. Now keep him still a very little while, talking appealingly to him, and tell him again to get up, which he will very promptly do. This must be done again and again, always saying distinctly, "Sit up, Sir!" when that is what you mean, and always fondling him and giving him something nice to eat. There is no difficulty in inducing a colt to go through these lessons, or a young horse. It can be done for an older and heavier animal as well, but with some more care and patience.

These simple methods of teaching the horse cunning tricks are enough to show that almost anything may be taught to a young horse. It shows also that the best method is kindness ; and that by as much as you make him obedient to your voice, by so much you make him a more safe and a more valuable family horse.

CHAPTER XX.

TRICKS OF HORSE JOCKEYS.

Every one who has read the Vicar of Wakefield will remember how the poor, verdant son, Moses, fell among thieves when he took the horse to the fair and was himself taken in hand by the jockeys. If one goes to the dictionary it will seem a very innocent thing to be called a jockey, that is, a rider of horses, and yet it is commonly understood to mean a man who habitually trades in horses that are bad or indifferent. It is generally believed that he can take any kind of diseased or crippled horse, and, doctoring him for the occasion, can cover, for the time, a fatal or incurable disease. If he has access to your sound horse for a few minutes, he can make him appear to be laboring under a chronic malady that makes him worthless. He can take his own horse, lame in one leg, and by making him lame in the other, sell him for a quick stepper.

The wisest man in the world, as to horse flesh, will be the gainer, in the long run, if he does not trade at all with a horse jockey, buying, selling or swapping. If he does, he must expect to pay the expenses. Many a man is so fond of trading that he will barter away all the value he may have had in horse flesh when he began. A man, who could be named if necessary, traded often, for a year. He had two very good horses to begin with. At the end of the year he had two horses yet, but not worth half as much as

the others, and he had paid out, in boot money, a little over \$500. The moral of this is, a man had better know with whom he trades, so that he may know what kind of goods he may expect.

A horse jockey, if he can get access to your horse, can make him appear to be badly foundered when there is nothing the matter with him. A horse can be made to seem permanently lame by running a hair from the tail, by the aid of a needle, through a certain muscle. By a miserable trick he can make the horse stand by his food and not take it till some one, who knows the art, comes and undoes it. He can take a cribbing horse, or a wind sucker, and stop all sign of the disease, for the time, by a certain operation on his mouth. A young countenance can be put on an old horse, a heaving horse can be made to appear perfectly well, and a true pulling horse can be made to balk, all by methods that injure a horse to do them. In fact, it has occurred that a man has sold his horse for utter unfitness for riding or driving, giving his character truthfully, and after the animal had been doctored and trimmed and painted, he has bought him again at ten times what he sold him for, under a written guarantee that he could do a large number of, what was for him, impossible things.

No reference is made here to the legitimate business of breeding, buying, or selling horses. These occupations are usually in the hands of high minded and honorable men. They have nothing of character in common with the miserable frauds just described.

As a general rule you can only get an honest horse from an honest man.

CHAPTER XXI.

HOW TO RUIN A COLT.

Always allow the traces to keep the hair worn off the sides of the horse, and the hair of his tail to hang in ropes. His mane may toss on either side, or both ways. The lines and traces, from being often tramped, become weak in places, and, being liable to break any time, runaways will be frequent. The horse being left to cool in a cold wind, naturally coughs. There are draughts through the stable, and he has signs of rheumatism. The odors of the stable from the fermenting manure heap are at all times stifling and the horse remains thin and weak, and liable to excessive sweating with the least exercise. Corn stalks are nourishing food, and cheapest when the horse gathers them himself. They are good enough in the mild weather of October, but in November they are scantier as the weather is frostier, till in December he will both starve and freeze looking for broken stalks under the snow. For the rest of the winter he can eat oats straw, and as his appetite is better when he runs out of doors, out he stays all winter.

When he is off for a drive for ten miles, give him the first mile on a tight run, and keep up the tune with the whip for the next nine. With a tight check-rein his head will be nearly at right angles with his spine, and he will look spirited. On arriving, hot, hungry, thirsty and tired, cool him at a post without

a blanket, without a let-up to his body or a let-down to his head. After two hours he returns the same way, and, as he is hot and jaded, let him rest at the fence before going to the ventilated stable. Feed oats in a manger with holes in it. In the spring he is too light for plowing or driving, and will be sold for a little beyond the value of the miserable hide, and the colt that takes his place meets the same fate. That is the way not to do it. This system even poorly carried out would ruin Rysdyk's Hambletonian, or Alexander's Abdallah, in eighteen months.

PART FOURTH.

TROTTING.

CHAPTER XXII.

TROTTING IN AMERICA.

It is just one hundred years since trotting came into special notice in America. In 1788, on a bright morning in May, at the foot of Market street, Philadelphia, there was landed the English stallion, Messenger. He was gray, fifteen hands three inches high, was said to be thoroughbred, and was eight years old. His recorded ancestry ran back through Mambrino, Engineer, Sampson, Blaze, and (Flying) Childers, to the Darley Arabian, a full Arabian horse brought to England in the reign of Queen Anne, 1702-1714. He had run in England with moderate success, and later ran a mile in three minutes in this country. He lived twenty years after his importation, and died on Long Island and was honored at his burial by the firing of a volley of musketry over his grave. His progeny were more distinguished than himself, for as trotting came on the turf, it was found that the best trotters were the descendants of Messenger. He was the grandsire of Abdallah, which was in turn the sire of Rysdyk's Hambletonian, both of these illustrious among trotters. And now, at the end of a hundred years since Messenger stepped on our soil, his descend-

ants are among the most distinguished trotters, or sires of trotters, on the earth. Prominent among hundreds of others are the names of Mambrino, Alexander's Abdallah, Rysdyk's Hambletonian, Dexter, George Wilkes, Phallas, Almont, Goldsmith Maid, Jay-Eye-See, Bell Boy, and Nutwood.

It was not till ten years after Messenger received his final military honors, that there was a public trotting against time in this country, and that was in 1818, and for \$1000. The occasion of this contest was that eminent horsemen declared that the horse did not live that could trot a mile in three minutes. A new horse, called Boston Blue, performed the feat and was honored much as a new horse would be in 1889 that should do the same thing in two minutes. Turfmen fix on 1830 as the time when trotting had become so popular in this country as to become an established sport.

The turf has a future in the United States that can now be but very dimly outlined. The time for trotting a mile shortens continually; the price of fast trotters goes up all the time; and the candidates for distinction in speed are greatly increasing every year. In England, while the number of tracks has fallen off one-half in fifty years, the value of the stakes is on the increase, and no other amusement awakens half so much enthusiasm among all classes.

The cultivation of speed in trotting carries with it improvement in the qualities of endurance and docility. In Arabia, where the average speed of the horse is the greatest in the world, there also the horse is a lighter feeder, and he is more kindly in spirit than anywhere

else. We can form some idea of the almost winged speed of a swift horse, from the fact that the flying Childers, son of Darley Arabian, was known to pass over eighty-two and a half feet in a second of time, a rapidity that surprised the world a hundred and fifty years ago, but surpassed since by Lexington, an American. The photograph of a fast trotter has been taken, showing every foot off the ground at the same instant. As the very definition of trotting is, that, alternately, two feet are in the air and the other two on the ground at the same instant and on opposite sides, it follows that if all the feet are off the ground at once, that the horse must be, for a part of the time, actually flying without wings.

It has come about that price and speed are going upward together with equal step. As it is well known that the best class of sires impress their own characteristics upon their offspring, it is quite possible for any well appointed stock farm to amass for its owner a fortune. Nor need he wait but a very short time till he begins to reap his golden harvest. When a breeder refuses sixteen thousand dollars for a three year old filly, or a suckling is sold at auction for \$3750, or a trotting stallion brings at auction \$50,000, there must be long money in the business of breeding, for many years to come.

There are well known families of trotters other than the Messenger, or the line known later as the Hambletonian, as for example; the Morgans and Bashaws, the account of which our limits rule out. Constant accessions are being made to the trotting aristocracy.

CHAPTER XXIII.

PRACTICAL TROTTER TRAINING.

Many readers of this book will be grateful for the next two chapters from the pen of Joseph C. Callahan, a farmer, residing four miles south of Sandwich, Illinois. For fifteen years he has given careful and intelligent attention to training colts for trotting. He is also a breeder of horses, looking chiefly to speed. That he has been successful, so that he knows what he is talking about, is abundantly proved by the following five lines from his record:

OWNER AND TRAINER OF	RECORD.
"Callahan's Maid,	- - - - 2:25.
"Troubadour,	- - - - 2:18.
"Nettie C,	- - - - 2:23.
"Billy K,	- - - - 2:35.
"Trainer of Sir Knight,	- - - - 2:23 $\frac{3}{4}$.

With this introduction to Mr. Callahan you will read with great interest what he says on the practical subject of breeding and educating trotters, in the next five pages.

CHAPTER XXIV.

THE ART OF TRAINING TROTTERS.

BY J. C. CALLAHAN.

Victor Hugo has the credit of saying: "If you want to reform a man you must begin with his grandmother." If you want to raise a trotter you must begin several generations back. A good trotter never comes by accident, but he is the result of careful breeding. He is the product of years of careful work in selecting and in reproducing the qualities that make for speed. If you want to raise a fast trotter you cannot wait for a dozen generations of horses to develop the qualities of speed for you; you will have to build on the work done for many years before you begin, and you can select a sire and a dam, if you will, that will bring you what you want. In the first place, the mare must have intelligence; what we call good horse sense. Then she must have good limbs and feet, for poor limbs cannot stand the wear and tear of hard trotting. Indifferent limbs might stand it to trot a mile in three minutes, or possibly in 2:40, but no horse can trot heats in the twenties, or lower, unless his limbs are perfect. Thirdly, select a mare that has the right way of going, good knee action, a long stride, and one that goes wide behind. This is the best way of going, for a horse that is gaited this way goes with the least friction. But almost every horse has some pecu-

liarity of action, and the main thing is to get there ; but a horse must either be a long strider, or else be very rapid gaited to be a fast trotter. The long strider will gain in speed the fastest but he is more liable to strains of various kinds because he covers more ground at one step and therefore uses more strength.

In selecting a stallion you will look for the same qualities just mentioned as being needed in the mare. Do not be misled by pedigree. You are to take the qualities that you want to have reproduced and look for them more in the horse himself than in his ancestors. He may have failed to inherit the ancestral speed and it may never appear in his progeny. You are aiming to produce a fast trotter, then look for the exact qualities in the sire, that you wish to reproduce. There are scores of standard bred horses that cannot trot, and no skill of trainers or drivers can make them go, for it is not in them. Breeding is all right when you have a performer, but what is a pedigree without the horse? There was a full brother to Rarus that could not trot a mile in 3:00. Maud S. has brothers and sisters, but you do not hear of any 2:10 among them. In the fifteen years that I have been driving and educating trotters, I have only driven one standard bred horse and he was the poorest of the whole lot. He had but one redeeming quality and that was pluck; in that he was a regular bull dog, but that was a poor substitute for speed in a trotter; but such horses as Troubadour, 2:18, or Sir Knight, 2:23 $\frac{3}{4}$, not bred strictly to the rule, were his superiors by far. It is common now for moneyed men to pay high prices for pedigree, but in my opinion there is more real value

in the horse that excels on the turf, whatever may have been the breeding.

We had good horses ten and twenty years ago, when they had longer and harder races than we have now. And now, well, as our horses perform in our time, and by our methods, I believe that if our horses were tried in the kind of races of twenty years ago, they would make no better records than were made then. I will give my reasons for thinking so and if I am wrong I will be glad to be set right: The way a thoroughbred is produced is by inbreeding, and the closer you inbreed the more pure the strain of blood becomes, but you diminish the animal in size and you weaken the constitution. You can produce a thoroughbred by breeding as closely as possible for four crosses, then you have a clear strain of blood either in horses, cattle, or hogs. Some trotters are so closely inbred, and have been for years, that there is no vitality left. It often happens that to cross out and not get a standard animal has a good result. There are some rules that have no exceptions; one is, breed to trotters for trotters; and another is, that you cannot get something out of nothing.

CHAPTER XXV.

HOW TO DEVELOP SPEED.

When you are ready to develop speed let your young trotter be somewhat matured; four years will do, but five are better. Shoe him tolerably heavy forward and as light as possible behind. Most new beginners go too low in front, and a little weight gives them more knee action, and gets them started sooner. Try and get your colt gaited right at the start; have him go square and level, every lick just alike. Let him take a jog of four or five miles on the course, or on a good road, and keep increasing the gait toward the last and finally end up the last half as fast as he can trot. Do not rush him off the square gait I have alluded to. It is better to slow him up than to have him begin to hitch or single foot; if he reaches out and shows you a nice gait do not speed him too far to make him tired or discouraged, but stop him while he is doing well ; the next day you can go through the same course, and if you do not overdo him he will make improvement in something or other every time he is out. Do not lose your patience about anything. Fast trotters are not made in a week, nor in a year, and if he fails to do well to-day he will not fail some other day. A colt of good parts sometimes fails to make a trotter, for no fault of his, but of his trainer.

Feed a colt, that is in training for a trotter, enough of good food to keep him strong. The method of

drawing or starving them is a thing of the past, and trotters of to-day can have plenty of good hay, and thirty minutes at grass every day, and still trot ; and we make trotters in one half the time they used to. A colt should be empty when he is trotting, but after work nothing is too good for him. My method is to feed only oats, and not over two gallons of water, till they have been worked out and then I feed him well ; starving a horse will not promote his speed.

When a horse has been warmed by trotting he should not cool off too quickly. He should be covered well, and kept out of any draught, so he will cool off gradually. Then the muscles will not become stiff, and no bad results will follow. A horse should never stand with his breast to the wind ; the opposite is far safer for any horse.

The legs of a trotter should be well taken care of ; no horse will go at his best if there is any stiffness or any fever in his legs. It takes a master mechanic to keep a horse's legs all right, and be trotting him in the twenties or less. He will need bandages, arnica, Pond's extract, bay-rum and high wines, and the horse will need grooming and rubbing, and food and water, at regular times, and time for rest and sleep. The man who has the care of a fast trotter has more to do with the animal's success than the driver has. Some horses seem able to endure any kind of irregularity and never seem to mind it, never get bruised or lamed or worn out, while others need a board of health and a drug store to keep them all right. He keeps on the safe side who allows no possibility of accident as to wind or limb, food or rest, heat, cold or exercise.

CHAPTER XXVI.

STANDARD RULES.

The American trotter has the best record in the world. The breeding of trotters is now brought to great perfection. There has grown up a trotter aristocracy among horsemen which is growing so rigid in its rules, and speed is increasing so rapidly, that the time is probably near when a mile will be made in 2:00.

The rules governing admission of horses to standard rank have been somewhat amended this year, (1888,) so that they now stand as follows:

1. Any stallion that has himself a record of 2:30 or better, provided any of his get has a record of 2:35 or better, or provided his sire or dam is already a standard animal.
2. Any mare or gelding that has a record of 2:30 or better.
3. Any horse that is the sire of two animals with a record of 2:30 or better.
4. Any horse that is the sire of one animal with a record of 2:30 or better, provided that he has either of the following qualifications: [A] a record himself of 2:30 or better; [B] is the sire of two other animals with a record of 2:30 or better; [C] has a sire or dam that is already a standard animal.
5. Any mare that has produced an animal with a record of 2:30 or better.

6. A progeny of a standard horse when out of a standard mare.

7. The female progeny of a standard horse when out of a mare by a standard horse.

8. The female progeny of a standard horse when out of a mare whose dam is a standard mare.

9. Any mare that has a record of 2:35 or better and whose sire or dam is a standard animal.

AVERAGE OF EXTREME SPEED.

The average of extreme speed of trotters in this country, gains with every decade. Here is a statement of it made up by taking the average of the five fastest performers for each decade since 1820. It is from the pen of Leslie E. Macleod, the highest authority:

1820 to 1830	-	-	-	2:42
1830 to 1840	-	-	-	2:35 $\frac{1}{4}$
1840 to 1850	-	-	-	2:28 $\frac{1}{2}$
1850 to 1860	-	-	-	2:25
1860 to 1870	-	-	-	2:18 $\frac{3}{4}$
1870 to 1880	-	-	-	2:14
1880 to 1887	-	-	-	2:11 $\frac{1}{2}$

CHAPTER XXVII.

HOW TO LAY OUT A TRACK.

Dunton's *Spirit of the Turf* gives the following method of laying out a track:

FOR A MILE TRACK.

A field of forty-two acres will do. Draw a line through the oblong centre, 440 yards in length, setting a stake at each end. Then draw a line on either side of the first line, exactly parallel with and 140 yards from it, setting stakes at either end of them. You will then have an oblong square 440 yards long and 280 yards wide. At each end of these three lines you will now set stakes. Now then, fasten a cord or wire 140 yards long to the centre stake of your parallelogram, and then describe a half circle, driving stakes as often as you wish to set a fence post. This half circle, commencing at one side and extending to the other, will measure 440 yards. When the circle is made at both ends of your parallelogram, you will have two straight sides that measure 440 yards each, and two circles of exactly the same length, which, measured three feet from the line, will be exactly a mile. The turns should be thrown up an inch to the foot.

HALF-MILE TRACK.

Draw two parallel lines 600 feet long and 452 feet five inches apart. Half way between the extreme ends of the two parallel lines drive a stake, then loop a wire around the stake, long enough to reach to either side.

Then make a true curve with the wire, putting down a stake as often as a fence post is needed. When this operation is finished at both ends of the 600 foot parallel lines, the track is laid out. The inside fence will rest exactly on the line drawn, but the track must measure a half mile three feet from the fence. The turns should be thrown up an inch to the foot. The stretches may be anywhere from 45 to 60 feet wide.

CHAPTER XXVIII.

MORALS OF THE TRACK.

It has come to be a saying that wealth, learning and horses never go hand in hand. Yet there are some notable contradictions of this, among whom Mr. Bonner and W. H. H. Murray have a national fame, and the pencil of Rosa Bonheur was happier among horses than anywhere else. There is no reason in the world that horsemen should be slangy, vulgar or profane. There is nothing in the business to degrade men, more than there is in the trade in cattle or in grain. No one can admire horses and bring them to their highest perfection by study and work, without being at least sober and regular in his habits, and humane. Many fast horses are so valuable that they can not be owned except by men of great wealth, and it is a rare thing that the owners of fine stock are anything else than refined and honorable men; as much so as well to do farmers and merchants.

It is for horsemen themselves to make their profession as reputable as any other. Tricks and dishonesty, and gambling and drinking, should be run off the track. The superiority of speed should be as honestly ascertained as the excellence of cabbages, or of oil paintings. Even the stable, where good blood is kept, should not only be tidy, but should also be morally clean. The American turf will reach its highest respectability and also its best returns of money,

when our horsemen require that every trainer and groom and rider shall have the character and habits of a gentleman, or lose his place.

Nothing attracts the masses in this country more than the trials of speed between famous, or fine horses. The owners of running or trotting stock should control the places of meeting so far as to insist that nothing derogatory to public morals shall be allowed at trotting tracks. It is in their power to do this. It ought to be done. The management should not abate their expenses by giving license to men to set up their gins to fleece their spectators. It is a misrepresentation of the whole enterprise to have the grounds studded over with petty gamblers with rings, and balls, wooden babies and lotteries and with saloons. It is not for owners of horses nor their trainers or riders that such miserables gather at the track; it is to deceive or rob the visitors. It is hoped by many that the managers of trotting tracks shall clean out their grounds from all such nuisances, and if they do not, that owners of fine stock will refuse to bring them out at such places.

PART FIFTH.

THE FOOT OF THE HORSE.

CHAPTER XXIX.

THE STRUCTURE OF THE HOOF.

The hoof of the horse is more exposed to wear and tear than any other portion of his body. To supply this loss there is in him a manufactory of horny matter, exactly adapted to his ordinary life. The hoofs are in their nature of the substance of the nails or claws of other creatures, and like these they grow from the base. The outside is of hard, dense, compact, insensible horn, and it is of fine, thin laminæ or layers. These laminæ are of the nature of membranes, and in the inner part are supplied with many blood vessels and nerves, indicating great sensitivity. If a wrongly directed nail in shœeing, or a nail splintered in driving because made of poor iron, should penetrate this sensitive part of a horse's foot, it would cause intolerable pain, resulting in inflammation and possibly lock jaw, or even in death. It occurs sometimes from general ill health, or from local causes, that the hoof is not well enough fed. If the secretion of horn is interrupted, or if from local fever the hoof dries up or becomes brittle, it indicates that the gelatine is dried out and that the hoof wants food. Local applications, rightly chosen, will give nutriment and new vigor to the hoof until the system

comes into the hoof-nourishing conditions. The dews are cooling and softening and carry healing to the hoof, while bathing in hard water makes it more brittle.

A gentleman in Wisconsin, well known to the writer, owned a fine saddle horse, nearly or quite thirty years old, that lost the horny part of one hind foot by pulling out of a corduroy bridge. The horse was too much of a pet in the family to be killed, and for humanity's sake he was turned out in a damp meadow. This was in the spring, and before the frost came the hoof was reproduced, leaving neither lameness nor disfigurement.

The Philadelphia Record, of recent date (August 1888,) relates a fact showing the capability of the hoofs to take on new life. "The trotting stallion, Domestic, seven years old, with a record of 2:20½, is owned by Mr. John H. Goldsmith, of Washingtonville, N. Y. In August, 1887, in a stubbornly contested seven heat race, he contracted a severe cold, which ended in laminitis, or acute inflammation of the laminæ of the forward feet. Suppuration afterwards set in, and the veterinary surgeon who attended the horse decided to resort to the novel and delicate surgical operation of removing the hoofs with the knife. Usually, in cases of this kind, the old hoof is permitted to slough off, or to be pushed off by the new growth of horn, but this treatment involves danger of deformity, or permanent lameness or both. The operation was performed and by January last, (1888,) new and thin but shapely hoofs had grown over the exposed laminæ, and the horse was able to get on his feet again."

Nature provides that the hoof of the horse shall often be wet with dews and rains, and the best pastures, in a dry time, lure him to the moist lands, so that the hoof shall not become dry and brittle. Many horse owners do not favor nature in this farther than to let it rain sometimes. Standing on the dry floor, traveling on hard dry roads, washing the horse's feet in hard water, are all destructive to the hoof. Instead of drying up the hoof, better frequently fill the hollow of the foot or the cavity of the shoe with one part tar oil and two parts whale oil. This will feed the hoof and prevent drying.

For diseased hoofs, corns, contraction, quarter-crack, brittleness, chronic laminitis, tender feet from any cause, use the Dempsey Hoof Pad. See advertisement in this book. It restores soundness to tender feet, and it admits of any necessary medication while it is worn. It prevents slipping, and adds to the elasticity of the frog.

CHAPTER XXX.

TO SHOE, OR NOT TO SHOE.

The belief that every horse that travels, or that works on a farm, must have pieces of iron nailed to his feet, puts the horse and his owner at the mercy of the shoe-smith. This man is not often a student of horse anatomy. There is no class of workmen so fond of being thought original as the horse shoer. His theory of shoeing is generally his own. He does not verify it by actual dissections, nor does he study carefully the nature of the hoof before he adopts his methods. The many serious mistakes made in shoeing horses naturally awakens the inquiry as to the actual value of the horseshoe. The use of the horseshoe is modern. Bucephalus, the charger of Alexander the Great, never was shod. The later Greeks never used upon their horses any kind of shoes. Great generals, like Alexander, Hannibal and others, often had great armies delayed, and sometimes defeated, by the wearing out of the cavalry in hilly and rocky countries. For a short campaign, or for short journeys, shoes are not important. The farmhorse rarely fails in his feet for want of shoes. The horses of our North American Indians are never shod, and their feet never fail them in escaping from our well shod cavalry. Dr. Rees's Encyclopedia states that the Romans, much as the people of Japan do now, sometimes placed on the feet of their horses what we would call boots, made of

sedges twisted together, or leather, strengthened with plates of iron, but without any nails being driven into the feet. Nero used these in gorgeous style, bespangling the horse's boots with silver and gold. The first horseshoe now known to have been used was worn by the horse of Childeric I. (481,) which shoe is yet in existence, and much resembles that of modern make. It is not a hundred years since draft horses wore shoes weighing five pounds each. "The Coming Man" will stand between the man who never shoes, and the man whose horse's feet are injured by shoeing. He will not shoe all his horses, but only those that need it, and them only while they need it. In any event he will have the sole, bars, frog and heels as untrimmed as he does his own thumbs and heels.

An interview with Hon. Lewis Steward, of Plano, Illinois, during the preparation of these pages, is too important to remain unnoticed here. Mr. Steward said that some years ago his attention had been called to the injurious effect of the shoeing of horses, and he had long since ceased to have his horses shod. He remembered that, fifty years ago, one John Evans lived near the present site of Plano, and was the owner of a little sorrel mare that probably never was touched by a shoe in her life. Evans would leap on the back of this unshod mare and, across acres of ice and crusted snow, would run down and capture prairie wolves in a fair race for speed. Mr. Steward had, a few years ago, a fine horse whose feet became diseased, and the paring and shoeing, and changing of smiths, only made them worse. Suppuration set in and he resolved to take off the shoes and to pave the horse's stall with

cobble stones. This was done and the feet were soon well and have been sound and unshod ever since. Another of his stallions, now twenty-three years old, has been happy in his bare feet on the cobble stones for several years. The use of the cobble stones was to give exercise to every part of the hoof so that a healthly circulation could be kept up in the elastic part of the foot.

On driving along the streets after his two galloping ponies, that never in their lives wore blinds or check reins or shoes, Mr. Steward drew up before a two horse team with a load of wood, weighing, probably, three thousand pounds, drawn by two heavy, broad, strong mares. This was one of his teams. Their feet were round, regular and unbroken, and had not worn shoes for years. They were headed for a steep hill which he said they could go down without locking the wheels, or up without diffculty, and without shoes, at any season, except about once a year for two or three days at a time. None of his one hundred and fifty or more of horses were ever kept in the stable, in the winter, for want of shoes, and none stopped from going up hill or down for want of being shod, or ever became lame from worn or injured feet.

On being asked if he would never shoe a horse, he said, he would shoe only for an emergency; if he had to drive over fields of ice he would have his horses shod, but as soon as the ice was gone he would have the shoes taken off.

It is evident from Mr. Steward's views and habits that thoughtful men begin to doubt the wisdom of keeping horses shod all the time, or even shoeing

horses at all, for ordinary work. It is seriously doubted by many whether the shoeing process preserves in soundness as many feet as it ruins. William of Normandy allowed a native British lord to retain his estate for the service of shoeing his horses, but the bold and wiley Norman made a condition that when a palfrey was injured by the shoeing, a sound one should be furnished instead. That would be a wise and wholesome arrangement to make in these days.

CHAPTER XXXI.

SHOEING THE HORSE.

Nature provides for the continual growth of the hoof of the horse and also by a natural sloughing off, for the progressive removal of the part made useless by growth. The natural process leaves very little to be removed by the blacksmith, certainly nothing but the natural growth under the shoe. When he does cut he should leave the foot in its natural shape and pare away only enough to fit the shoe evenly on the hard and horny wall of the hoof. Never cut the foot to fit the shoe. For a man this would be barbarous; it is about the same for a horse. Make the shoe so as to fit the foot.

The portion of the hoof between the bar and the quarter is the breeding ground of corns. On that part no pressure should ever come. The hardened, horny substance, around the outside of the hoof, which is about half an inch thick, should rest evenly on the shoe, and that part only. Inside of that there is a softer, cushion-like substance, never to be cut nor even touched, except to be washed. If let alone it will sufficiently shed its superabundant growth. The frog cuts like cheese and it is so easy and nice to cut at it, that the man with a sharp knife cuts away, knowing that he will never wear the shoe himself nor drive the horse. A knife should never touch the foot of a horse,—leave the sole or frog as nature made it. You might

better level your own sole with a knife than the horse's. All the part of the hoof inside the horny rim should be as free from cutting as from pressure. Making a shoe hot and fitting it by burning is horrible. Do not permit it. It is followed by an unhealthy secretion of horn, the animal will be less sure footed, and will be liable to become lame.

The kind of shoe to be preferred depends on the season of the year. If you want more iron in the shoe do not make the shoe thicker but broader. This will keep the foot nearer the ground and so give more efficiency to the frog, that natural cushion in the middle of the foot. After the shoe is put on, the frog should be about as near the ground as it was before ; this will break the concussion of the step on hard or rocky roads. The main force of the horse's leg is thrown on the toe at every rapid step. The toe then should have the chief protection, and the elasticity of the heel should be as little disturbed as possible.

These conditions are finely met by the Dempsey Shoe Pad which is fastened on the horse's foot by metallic tips, and that covers the frog and heel with gutta percha, an elastic coating which at the same time protects the heel from cutting and wearing, and also adds to its elasticity. See a descriptive advertisement of this invention at the end of the book.

The fancy to have the heels of the shoe project far behind the horse's foot is foolish and injurious. On the forward shoes an eighth of an inch is the farthest back they should go. On the outside of the hind shoe, the outside calk, if calks are used, may be three-fourths of an inch back of the heel. The shoe should

follow the circle of the curve of the foot. The smith should show his skill in conforming the shoe to the foot and not in cutting down the foot to the shape of the shoe. This should be strictly followed except at the hind heels where the shoe should be a little wider, extending towards the outside.

Do not use a rasp on the outside of the hoof, unless it be a very little smoothing of the hoof just where it touches the shoe. To scrape your own nails with a rasp or sharp knife would soon ruin them.

Let the nail holes crowd towards the toe rather than towards the heel. Then the nails will not pierce the quick, laming the horse and injuring the foot. Our best smiths prefer the hot-forged nails, and use the fewest number that will securely hold the shoe in place.

The nails should fill the holes, and the heads should fill the crease, projecting as little as possible. Nails made by rolling cold iron become laminated in the process, the danger of which is not discovered by examining the nail before using it.

The cold-forged nail is liable, in driving, to spread into splinters in the hoof, producing lameness, disease and even death.

CHAPTER XXXII.

THE HORSE'S AGE BY HIS TEETH.

The following rules for telling the age of a horse by his teeth are generally reliable, though not infallible, as exceptions will sometimes occur with every rule. Up to eight years the age is determined from the teeth of the lower jaw.

Eight to fourteen days after birth, the first middle nippers of the set of milk teeth are cut ; four to six weeks afterwards the next pair to them ; after six or eight months the next pair, or cutters.

All these milk teeth have on their front surface grooves or furrows, which disappear from the middle nippers at the end of one year ; from the next pair in two years, and from the incisors in three years.

At the age of two years the middle nippers are shed, and in their places appear two permanent teeth with deep black cavities, and full, sharp edges. At the age of three, the next pair are exchanged for new ones ; at four years the incisors fall out, and are replaced by new ones. At five years old the horse has his permanent set of teeth.

As the horse increases in age the teeth grow longer, but at the same time are worn away by use about one-twelfth of an inch each year, so that the black cavities in the middle nippers disappear in the sixth year; those of the next pair in the seventh year; and those of the incisors in the eighth year. The outer

corner teeth of the upper and lower jaw just meet at the age of eight years.

At nine years old the cups disappear from the two middle nippers above, and each of the two upper corner teeth has a little sharp protrusion at the outer corners.

At ten the cups disappear from the next two upper teeth.

At eleven the cups disappear from the upper corner teeth, and are only indicated by little brown spots.

From the twelfth to the sixteenth year the oval form becomes broader, and grows more and more triangular, and with the twentieth year the teeth lose all regularity. After this age there is nothing in the teeth that will indicate the age of the horse, or justify the most experienced examiner in giving an opinion.

The tusks are cut between the third and fourth year; their points become more and more rounded until the ninth year, when they lose all regularity of shape. Mares frequently have no tusks.

PART SIXTH.

CHAPTER XXXIII.

NUTWOOD.

On the adjoining page will be found a good likeness of the celebrated horse, Nutwood, of a still rising fame. The gentlemanly owners are Messrs. H. L. and L. D. Stout, of the Highland Stock Farm, Dubuque, Iowa. He is of a chestnut color, 15:3 hands high; weight 1,160 lbs., foaled May 1, 1870.

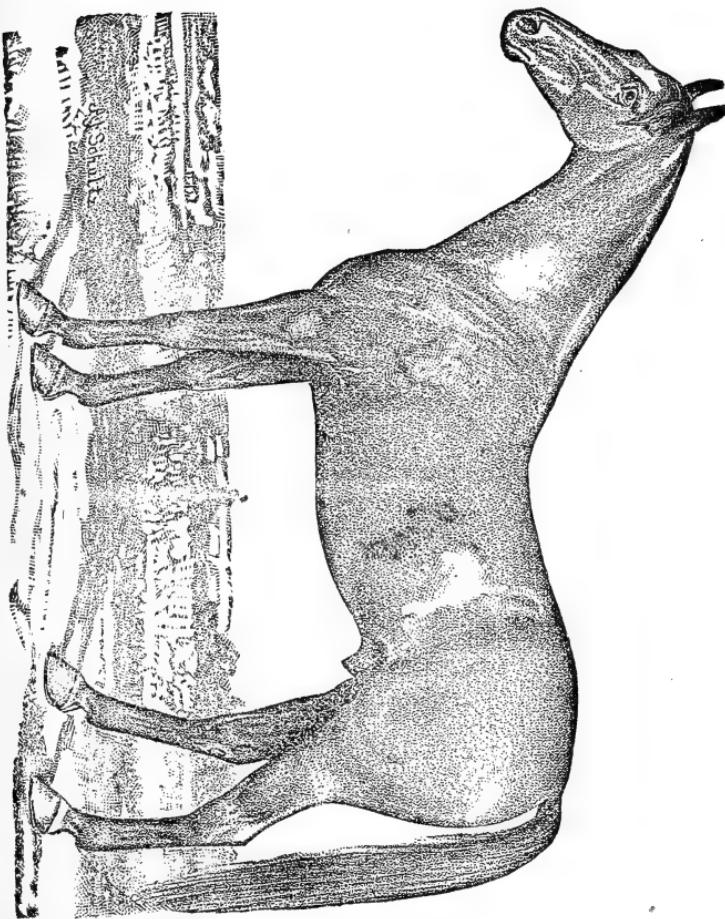
As a sketch of this fine horse would certainly be interesting to horsemen everywhere, a few points of his character are given here by permission of his owners. Mr. J. H. Wallace, who is the highest authority, says in *Wallace's Monthly*: "Nutwood when compared with others, point by point, is certainly the equal, if not the superior, of any trotting sire in the world."

The Kentucky Stockfarm says: "In conformation and disposition Nutwood is simply perfection." As there are many things in this horse that are unsurpassed, it is a matter of public interest to give some of his characteristics. He trots in 2:18 $\frac{3}{4}$, and he has added six this year to the number of his progeny in the 2:30 list, two of which have beaten 2:20, making in all twenty-two in the 2:30 list, five of them better than 2:20, and one with a record of 2:16 $\frac{1}{2}$, and a

granddaughter of his has a record of 2:19½. His dam, Miss Russell, dam of Maud S. 2:08¾, ranks all the great brood mares as a producer of extreme speed. It is believed that no sire has surpassed him, if any ever equalled him, in respect to the impressiveness with which he stamps upon his progeny his own characteristics which strongly mark his family.

Except to state bare recorded facts of what Nutwood is, little need be said. Individually he is excellent, of superior conformation, of good size, with remarkable substance combined with finish and quality. He has the best of legs, sound and clean, and good feet. He has an even, gentle temper, and is kind and intelligent in disposition. That he reproduces these characteristics, as well as great natural speed, in his offspring, is best known to those most closely acquainted with him and them. The lines that all intelligent breeders recognize as the best from Hambletonian, the greatest progenitor, are those through George Wilkes and Alexander's Abdallah. They are the lines that produce greatness not only in one generation, but through successive generations, and stand above all others. Nutwood is, by the records, the best living representative of the Alexander's Abdallah line.

The best test of the value of blood is the price it brings. Before the dispersal sale at Glenview, fifty-one colts and fillies by Nutwood, two years old and under, were sold by private sale, and by auction, at an average of \$1,307.50, and those sold for twelve months previous to that sale averaged \$1,728.26 each in cash. At the great sale itself, sixty-eight head, of Nutwood's produce, sold under the hammer for an



NO. II.—NUTWOOD.

average of \$1,570. Twenty-seven of these were weanlings and averaged \$1,350 each, and the yearlings averaged \$2,281. The highest price ever paid for a weanling was the \$4,000 paid for the daughter of Nutwood and Mattie Graham. At Glenview, at the auction, Cherrywood, weanling, by Nutwood, sold for \$3,025, and at auction, another weanling, Delphos, by Nutwood, was sold for \$3,750.

These figures need no comment.

CHAPTER XXXIV.

A HORSE ABSOLUTELY PERFECT.

Was there ever a perfect horse? There was a perfect man once whose name was Job. There was one animal of the horse kind, absolutely perfect in mind, and body, and in movement; at least so a graphic writer makes it in the Atlantic Monthly for April 1869. It is from the facile pen of W. H. H Murray,—Adirondack Murray. It gives the experience of an officer of our army, in the battle of Malvern Hill, who lay in a clump of trees, wounded, during most of the havoc of that bloody day. The wounded officer tells the story:

“ I saw, from where I lay, a riderless horse break out of the confused and flying mass, and, with mane and tail erect and spreading nostril, come dashing obliquely down the slope. Over fallen steeds and heaps of the dead she leaped with a motion as airy as that of the flying fox, when, fresh and unjaded, he leads away from the hounds. So this riderless mare came vaulting along, with action so free and motion so graceful, amid that storm of bullets, that whirlwind of fire and lead. So she came careering toward me as only a riderless horse might come. Her head flung widely from side to side, her nostrils widely spread, her flank and shoulders flecked with foam, her eye dilating. I forgot my wound and the wild roar of battle, and lift-

ing myself to a sitting posture, I gave her a ringing cheer.

"No sooner had my voice sounded than she flung her head with a proud upward movement into the air, swerved sharply to the left, neighed as she might to her master from her stall, and came trotting directly up to where I lay, and pausing, looked down upon me as if in compassion. I spoke again and held out my hand caressingly. She pricked her ears, took a step forward and lowered her nose until it came in contact with my palm, as if to court and to appreciate human tenderness.

"In weight she might have turned, when well conditioned, nine hundred and fifty pounds. In color she was a dark chestnut, with a velvety depth and soft look about the hair indescribably rich and elegant. Many a time have I heard ladies dispute the shade and the hue of her plush-like coat as they ran their white, jewelled fingers through her silken hair. Her body was round in the barrel, and perfectly symmetrical. She was wide in the haunches, without projection of the hip-bones, upon which the shorter ribs seemed to lap. High in the withers as she was, the line of her back and neck perfectly curved, while her deep, oblique shoulders and long thick forearm, ridgy with swelling sinews, suggested the perfection of stride and power. Her knees across the pan were wide, the cannon-bone below them short and thin; the pasterna long and sloping; her hoofs round, dark, shiny and well set on. Her mane was a shade darker than her coat, fine and thin, her ears sharply pointed, delicately curved, nearly black around the borders,

and as tremulous as the leaves of an aspen. Her neck rose from the withers to the head in perfect curvature, hard, devoid of fat, and well cut under the chops. Her nostrils were full, very full, and thin almost as parchment. The eyes from which tears might fall, or fire flash, were well brought out, soft as a gazelle's, almost human in intelligence, while over the small bony head, over neck and shoulders, yea, over the whole body and clean down to the hoofs, the veins stood out as if the skin were but tissue paper, against which the warm blood pressed, and which it might at any moment burst asunder. ‘A perfect animal’ I said to myself, as I lay looking over her,—an animal which might have been born from the wind and the sunshine, so swift and so cheerful she seemed—an animal which a man would present as his choicest gift to the woman he loved, and yet one which that woman, wife, or lady-love, would give him to ride when honor and life depended on bottom and speed”

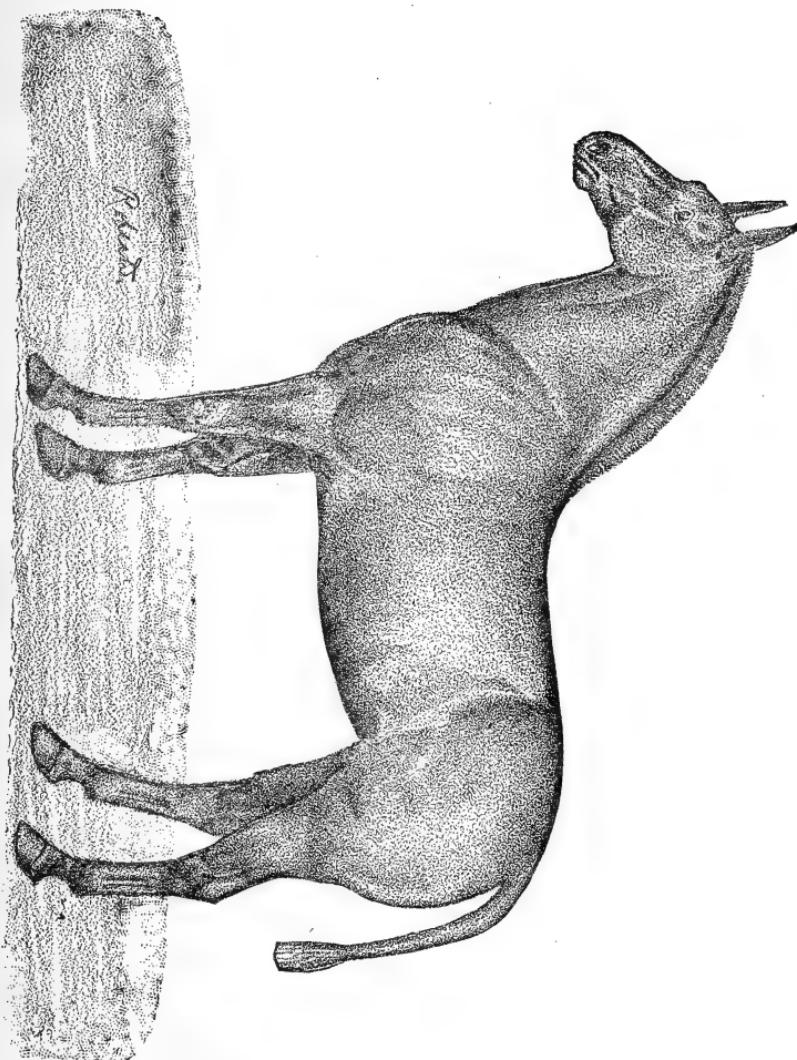
CHAPTER XXXV.

THE MULE.

The best mules are produced from the male of the ass kind and the female of the horse kind, taking from the former a general resemblance in form and patience and surefootedness; and from the latter, vigor, strength and courage. He is more easily kept than a horse; perhaps, because one line of his ancestry has for ages browsed on sterile mountains or searched over sandy deserts for his scanty food. We also attribute his sureness of foot and his facility in climbing or descending mountains to the character of the ancestral ass that climbs over precipices, as surefooted as the mountain goat, and that picks his meager food from the most frightful declivities.

The mule is of little use till he is four years old; his usefulness begins later than that of the horse, but it lasts longer, as he will endure, if treated reasonably well, twenty, thirty or even forty years. His size varies in different countries. In regions where both his ancestors are small in stature he is often no larger than a Newfoundland dog; but where the conditions of best size are met, he reaches fifteen or sixteen hands in height, or even more.

The first jacks for breeding purposes were introduced into the United States by George Washington, on his farm, in the fine climate of Virginia; the very large animals, presented him by the monarchs of



NO. 12.—THE MT. VERNON MILE

Europe, produced very large and strong mules, of which the general was very proud.

The mule has not always been excluded from honorable place. Anciently kings and princes rode upon mules and to this day in Spain mules draw the royal carriage, and a fine mule there costs more than a fine horse. The best mules in Europe are found in Spain, Italy and Malta. In America the best are produced in Kentucky and Missouri, where the mule-producing farms find profit in employing mares that are good, both in blood and for size, in producing mules.

In this country the indications are that the use of the mule will become more common, and that as his price advances the profit in his rearing will increase. The expense of raising mules is far less than that of raising colts. The skin is harder than that of the horse, and hence he will better resist the effects of sun, or rain, or cold. He is easily fed; he can carry or draw, can climb or descend mountains safely; he is free from the common equine diseases. He is especially valuable for military use, being preferred for all the uses of the army except for the cavalry. In our war in the south the horses gradually left the transportation service, the ambulances and the hospital trains, and were replaced by mules. In the war in Abyssinia the English found a fatal malaria that cut down their horses by the thousands but which did not harm their mules.

The carrying power of the mule exceeds that of the horse. The estimate of his burden for a day's journey is 30 per cent. of his own weight, but in the copper mines of the Andes he has oftener to carry 40

per cent. of his weight climbing around precipices within a foot's distance from the death line.

For breeding purposes the dam should be selected with the greatest care. She should have small head, round body, short back, wide chest, large thighs and arms, long neck, wide and round roofs and should be, at least fourteen, or better fifteen hands or more. The mule inherits shape and peculiarities of sire, and size from the mare, but very rarely her bad shape or unsoundness. Mares that are unsound, or defective in shape so as to be unfit for horse breeding may produce good mules.

In general the methods by which a horse is controlled and trained apply equally to his half brother, the mule.

CHAPTER XXXVI.

QUESTIONS AND ANSWERS.

So many questions have come in on various subjects, and so many of them are of general interest, that some of them are grouped here and brief answers given:

1. THE BEST HALTER.

Which is the best kind of halter for general use?

ANSWER:—The halter known as the five-ring halter is the best.

2. THE FASTEST TIME ON RECORD.

What is the fastest time made by American trotters?

ANSWER:—Johnston, pacer, 2:06 $\frac{1}{4}$, Maud S., trotter, 2:08 $\frac{3}{4}$, Jay-Eye-See, trotter, 2:10.

3. THE HIGHEST PRICE FOR A HORSE.

What is the highest price paid for a trotter in America?

ANSWER:—Bell Boy, a trotting stallion, brought at auction \$50,000.

4. TO PREVENT CROWDING IN THE STALL.

How will you prevent a colt from crowding against you in the stall?

ANSWER:—Take a plank about 12 feet long, 12 inches wide and 2 inches thick, and place one end on the manger and the other on the floor beside the colt.

As you enter the stall push it over gradually towards him, and go in, having the plank between you and him. You will keep him in close quarters in this way, and he will soon forget his trick of crowding.

5. THE RIGHT WAY OF THE TRACK.

Should the horse in practicing be driven the direction in which he is to trot, or the opposite?

ANSWER:—The trotter should always be trained going in the direction in which he is to make the full trial of his speed. If this is not done he is not sure to do his best in the race. Somehow the horse becomes confused, or he forms a habit of going to the right or to the left, and the reverse is awkward to him, much as it is to a man as to whether he uses his right or left hand in handling an axe or a hoe. Whichever a man or horse gets used to he cannot reverse it and do his best. The trainer will find this out sometime and will profit by it.

6. MESSENGER BLOOD.

Have we now living any horses that are sons of Imported Messenger, as an owner of a fine horse that I know of, says his is? Another has a colt that he says is from a Messenger mare. Can that be so?

ANSWER:—Imported Messenger died in 1808, so that his youngest son would now be about eighty years old. A mare descended in a recorded line from the same tree would be very respectable but would probably not be over one ten-thousandth part of original Messenger blood. It sounds well where there is no one to set it right, to say, “This horse is a Mes-

senger." The claim is very thin and will not answer instead of form or speed.

7. THE BEST BIT TO USE.

What kind of a bit do you use?

ANSWER:—I use different kinds of bits for different purposes, and for different horses. One must first learn the nature of the horse. For a fretful horse a bar bit is best. For general purposes I use a jointed bit. A curb bit is only fit to use on a horse under the saddle. If a horse is inclined to run away use a Rockwell bit. The mouth is the tenderest part of the horse on which force can be expended for controlling him. Harshness in the use of the bit is likely to produce what it is designed to remedy, and make a horse do, for pain and rage, the more wrong. Jerking at the tender mouth of a horse is a great cruelty.

8. CLIPPING HORSES.

Would you advise clipping horses?

ANSWER:—No, never. It is far from ornamental to the horse—it cannot be other than detrimental to health. It is possible, with great care as to clothing and unchanging warmth of stable, that the fatal effects of clipping may be postponed, but they are sure to come. Even the clipping of the heels and legs of horses is a frequent cause of disease. To take off all his coat adds nothing to the comfort of the horse nor as most people believe, to his good looks, and certainly it contributes nothing to his health or strength. It interrupts the healthy action of the skin, and it is almost certain to leave disease, if not in the skin, then in some other over-burdened organs of the animal.

9. THE OPEN BRIDLE.

Would you drive with an open bridle from the beginning, or would you adopt it after the colt is trained?

ANSWER:—No, I would not use an open bridle at any time. I prefer an easy fitting, blind bridle of soft leather, not too short in the head stall. Your horse has no business with any part of the world except what is straight before him. Take off the blinders and then if you touch the whip he will see the motion and he will start much worse than from a stroke of it. Then he will soon slacken his gait, become slattern and irregular in his motion, and start again in sudden surprise when the whip is touched. If you want a steady going spirited driver, safe from starts and frights of every kind, you will discard the open bridle from the first.

10. THE BLOOD OF THE WILD HORSE.

If there are herds of wild horses never yet domesticated, would it not infuse new and better blood into our present stock to breed with them?

ANSWER:—There is good reason to believe that all the horses now running wild are fugitives from the service of man, and their ancestors once belonged to private owners. The animals that serve man, as the horse, dog, sheep and others, do not improve so rapidly in the wild state as in the domesticated. What should we gain by breeding with a mustang, or the ewe-necked weakling of the pampas, or the unshapely wild horse of southern Russia? To breed from these would turn the horse-clock back more than a hundred years. Speed and strength do not degenerate with

domestication ; on the contrary, they increase, for the tame horse can carry a man and overtake a wild one.

11. THE USE OF THE WHIP.

Would you use the whip freely in breaking or driving?

ANSWER:—The whip is useful in training horses just as saw dust is useful in feeding cattle—the less sawdust the better. So the less whip the better. The whip breeds stubbornness and balkiness. It is often the cause of heaviness and awkwardness of gait. There is no animal that so readily gives his confidence and affection to his owner as does a horse. Most horses can be made gentle by kindness. It is at any rate the best way to use the whip just as little as possible. If the horse becomes used to obey the voice he will be quieted at once when otherwise he would be frightened, and he will struggle on under a load that the whip would make him utterly refuse to carry. The less of the whip, the more of a horse. Cruel welts are no sign of horsemanship, but prove the want of it.

12. HOW TO DRIVE A HORSE UP TO THE CARS.

How can you make a horse, old or young, go quietly up to the cars?

ANSWER:—A horse that is afraid of the train should be driven where he can see it. This should be done often, each time going a little nearer. The reason he is afraid is that he does not understand what it is. By a gradual approach he will come to regard it as a passing wagon. Let him go towards it slowly, and to see it well. Use the same rule as to fright about

anything else. After a while you can take him quite up to the train. To get him accustomed to the whistle of the locomotive is a different thing and will take quite as long to free him from fear of it as from the fear of anything else, perhaps longer, for he cannot see or smell an alarming sound. The secret of it is to get him accustomed to it gradually. All this can be done as a part of the training of a colt as well as not. It adds to the value of a horse to have him not afraid of the train, from ten dollars to fifty according to the work for which he is desired.

13. REPRODUCTION OF QUALITIES.

Can we with certainty reproduce the qualities of the stallion?

ANSWER:—Not always, there are too many factors here to make the result certain. It sometimes seems that ten different colts, of the same sire and mare, will be as unlike, mentally and physically, as any ten boys who are full brothers. There are pre-natal causes that affect an animal's size, color or shape. But there is in this respect a great difference in sires. There are some that impress their likeness very lightly on their progeny, others again very powerfully. The same is true of mares. One who breeds for rare qualities of speed or form should select only from the breeding stock that has demonstrated its power to reproduce its characteristics in the offspring. Nutwood, of which a short sketch is given in chapter xxxiii, is one of the best representatives of the class whose progeny are generally true to the ancestral stock in color, size, form and speed. In this quality there are

great differences among good strains, and good horses. The careful breeder must gather facts for himself on this point.

14. DO HORSES REASON?

Are not animals guided by reason, in a feebler degree than in man, but really by reason?

ANSWER:—That is a question for a philosopher rather than for a horse trainer. But here is an answer: By common consent we call the mental endowment of animals by the name of instinct, though some animals really seem to indicate actual reason. An elephant, to which a sixpence had been given, dropped it so near the wall that he could not reach it. He put his trunk against the wall and blew so hard as to throw the money nearer to him, when he picked it up.

The South American horse, when sold and carried across the river where it is too wide to swim back has been known to travel up stream perhaps a hundred miles to find a ford, where he crosses and comes back to his old home.

Since this book was in manuscript, (August 1888,) a large farm dog was given by one farmer to another in New Jersey. The dog was taken by rail 140 miles, and in six days after walked into his former master's house in a starved and worn condition. He had made twenty miles a day, and, if he went by the wagon road probably thirty miles a day. After all, while the exploits of an animal often surprise us, it is sagacity, and not reason.

PART SEVENTH.

DISEASES OF THE HORSE AND REMEDIES.

CHAPTER XXXVII.

THE HEALTH OF THE HORSE.

Buffon, the naturalist, writing a little over a hundred years ago, laments that no educated man takes care of the health of horses. Better times for horse flesh are upon us when we have schools and hospitals for instruction as to equine diseases. The result is already that the life and usefulness of the horse are much prolonged. The horse's natural age is about thirty years and he ought to be in his prime at twelve.

Good food and shelter come first as the means of preventing disease. The unsheltered and half-fed horses of Iceland and Northern Russia are always under size. It was the great strength of the well-fed Norman horses against the ponies of the Britains that decided the battle of Hastings in 1066, and let in the Normans. The colt that is under-fed and half-starved for his first three years is never half a horse afterwards. If a horse is given free range he will select only healthful food, and he will sagaciously select remedies for his disorders, if the cure is within his reach. On the contrary an ass will eat everything, so that there has grown up a saying, "The best physician is a horse and the best apothecaryian an ass." If

you will put rock salt and a rock of chalk in his manger, he will relish his food every day with salt as you do yourself, and he will take of the chalk when he has a sour stomach. What would your boarder think of you if you were to give him salt and pepper and sugar only on Sunday mornings, and then mix up in his pancakes enough to last him a week as you do for your horse? Infrequent and irregular feed and water will make him gluttonous. The camel, that travels for days without water, drinks a barrel when he gets it.

The stable should be airy, with windows not always open nor always shut, nor should the cold wind blow on his face or breast. He should not be kept in twilight, on a filthy floor, in a damp den, for sixteen hours in twenty-four, where foul air invades the lungs, and the odor of ammonia inflames the eyes. The air should be dry and sweet and his bed clean. The floor ought to be level, with perfect draining. The stall should be of the box pattern and not a narrow dungeon. Each horse should have a manger concealed from the eyes and the teeth of the next neighbor so that he can eat without haste or annoyance. A horse that is much out doors is always in motion and the elasticity of the sole and frog will keep the foot healthy. The horse tied in the stall where he can hardly move his feet will soon have them hard, inflamed and brittle, his legs will be benumbed and stiff, and he will probably be treated for rheumatism or springhalt, and die of old age at eleven. If he had a box stall in a lighted, clean, ventilated stable with regular food, his years of labor would have been double.

Prevention is better than cure. But accidents will happen. Changes of food and water, over-exertion and exposure of a creature that has no voice to complain, will often make a sound horse sick.

CHAPTER XXXVIII.

FAVORITE PRESCRIPTIONS.

The following prescriptions have been prepared with the greatest care by a very skillful and practical student of the diseases of the horses and their remedies. They can be depended on as being the methods of treatment pursued in an extensive and very successful practice for the last twenty years.

No. 1.—ALTERATIVE AND TONIC.

Fluid	Extract	Taraxacum	-	-	2	ounces
"	"	Sanguinaria	-	-	2	"
"	"	Hydrastis	-	-	2	"
"	"	Uva Ursi	-	-	4	"
"	"	Nux Vomica	-	-	1	"
Tinct. Ferri		-	-	-	3	"
Alcohol		-	-	-	4	"
Aqua		-	-	-	4	"

Dose, $\frac{1}{2}$ ounce 3 times per day.

No. 2—FEVER DROPS.

F. E. Aconite, Belladonna, Veratrum Viridi, of each one ounce. Mix.

Dose, from 10 to 20 drops in a little water every 30 minutes until pulse is reduced to 48 per minute, then 15 drops every six hours.

No. 3.—COOLING LOTION, FOR EXTERNAL INFLAMMATION.

Muriate Ammonia	-	-	-	6	ounces
Acetas Plumbi	-	-	-	2	"

Acetic Acid	-	-	-	-	4	ounces
Tinct. Arnica	-	-	-	-	8	"

Mix. Bathe the affected part thoroughly.

No. 4.—RING BONES, SPAVINS, CURBS, SPLINTS.

F. F. F. Ammonia, Spts. Terebinth, Soft Soap, equal parts.

Apply twice per day, for three days, then once per day for six days, then stop until scab is shed and if not well, repeat.

No. 5.—MILD BLISTER.

Biniodide Mercury	-	-	-	-	1	Drachm
Lard	-	-	-	-	1	Ounce

Apply once a day for three days, then rest three days and repeat. Good for splints, curbs or callouses.

After a blister is started do not inflame it with another blister on top of it or you will have trouble.

No. 6.—LINIMENT FOR SORENESS IN MUSCLES AND CORDS.

Hydrate of Chloral	-	-	-	-	$\frac{1}{2}$	Ounce
Tinct. Camphor	-	-	-	-	$\frac{1}{2}$	"
Oil Cedar	-	-	-	-	2	"
Oil Hemlock	-	-	-	-	2	"
Spts. Nitre	-	-	-	-	4	"
Alcohol	-	-	-	-	8	"

No. 7.—HARNESS AND SADDLE GALLS.

Tinct. Camphor	-	-	-	-	3	Ounces
Hamamelis	-	-	-	-	4	"
Tannic Acid	-	-	-	-	$\frac{1}{2}$	"

Apply three times per day.

No. 8.—COLIC, FLATULENT OR WIND COLIC.

Fluid Extract Aconite	-	-	-	1 Ounce
“ “ Belladonna	-	-	-	1 “
“ “ Colocynth	-	-	-	1 “

Mix. Dose: One teaspoonful in two ounces of water.
Walk slowly to prevent rolling.

Symptoms: Pain Intermittent. Pulse normal, extremities natural temperature.

No. 9.—BILIOUS COLIC, PAIN CONSTANT, PULSE RAPID,
BREATHING DISTRESSED, LEGS AND EARS COLD.

Fluid Extract Aconite	-	-	-	1 Ounce
“ “ Belladonna	-	-	-	1 “
Nux Vomica	-	-	-	½ “
Hyposulphite Soda	-	-	-	4 “

Dissolve soda in warm water, then add other ingredients. Dose: one teaspoonful every hour for 6 hours, then once in two or three hours.

No. 10.—THRUSH IN FEET.

Tinct. Iodine	-	-	-	-	1 Ounce
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Clean out foot well, then touch every part of diseased portion of hoof with the above, once a day for 3 or 4 days. Another: Sprinkle with Calomel once per day for 3 days.

No. 11.—HOOF OINTMENT.

Take $\frac{1}{2}$ lb. Lard and 4 ounces Rosin, heat them over a slow fire until melted, take the pot off the fire, add one ounce pulverized verdigris. Stir well to prevent running over. When partly cool add 2 ounces Turpentine. Apply twice per week.

No. 12.—FITS OR STAGGERS.

Give 2 ounces of Tinct. Assafœtida every morning for ten days. This is said to be a sure cure.

No. 13.—STOPPAGE OF URINE.

Give one ounce Sweet Spirits of Nitre, repeat in $\frac{1}{2}$ hour if not better, or give 5 drops Tinct. Cantharides in a little water every half hour, until better.

No. 14.—HEAVE POWDER.

Spanish Brown	-	-	-	$\frac{1}{2}$	lb.
Ginger	-	-	-	"	"

Dose: one spoonful twice per day.

No. 15.—GENERAL LINIMENT.

Take $\frac{1}{2}$ pint Linseed oil, one half pint Turpentine, 4 ounces Oil Origanum. Shake well and it is fit for use. This is good for all sprains.

No. 16.—TO STOP BLEEDING.

If you can get hold of the artery or vein, tie it up. If not, take 10 grains Nitrate of Silver and 4 ounces of water. Apply to the wound and it will stop bleeding.

No. 17.—CONDITION POWDERS.

Fenugreek	-	-	-	-	-	1 Ounce
Cream of Tartar	-	-	-	-	-	1 "
Gentain	-	-	-	-	-	1 "
Sulphur	-	-	-	-	-	1 "
Saltpetre	-	-	-	-	-	1 "
Rosin	-	-	-	-	-	1 "
Black Antimony	-	-	-	-	-	1 "
Ginger	-	-	-	-	-	1 "
Cayenne Pepper	-	-	-	-	-	1 "

Dose: one table spoonful once per day.

No. 18—FOR HORSES SUBJECT TO COLIC.

Tinct. Hydrastis Canadenses - 2 Ounces.
 Dose: 30 drops, twice per day.

No. 19.—SWEENEY LINIMENT.

Alcohol and Spts. Turpentine of each 4 oz. Tinct. Camphor, Tinct. Cantharides, Tinct. Capsicum each $\frac{1}{2}$ oz., and oil of Spike 3 oz.

Bathe the liniment in with hot Iron.

No. 20.—FOR WOUNDS.

Spts. Turpentine	-	-	-	-	4 Ounces
Alcohol	-	-	-	-	8 "
Tinct. Cayenne Pepper	-	-	-	-	1 "

Shake well and apply.

No. 21.—FOR WIND GALLS AND SOFT LUMPS.

Oil Origanum	-	-	-	-	4 Ounces
" Hemlock	-	-	-	-	1 "
" Lavender	-	-	-	-	1 "
" Wormwood	-	-	-	-	2 "
" Spike	-	-	-	-	1 "
Sweet Oil	-	-	-	-	8 "

Apply morning and evening. Rub well.

No. 22.—FOR THE EYE, TO REMOVE SCUM.

Calomel	-	-	-	-	3 Scruples
Olive Oil	-	-	-	-	1 Ounce
Belladonna	-	-	-	-	3 Scruples

Apply with feather twice per day.

No. 23.—CLEANSING POWDER.

Ginger	-	-	-	-	2 Ounces
Fenugreek	-	-	-	-	4 "

Black Antimony	- - - -	1 Ounce
Rhubarb	- - - -	2 "
Grind all fine and mix.		

Dose: large spoonful twice per day.

No 24.—TO CURE THE MANGE ON A HORSE.

Wash him thoroughly with soap and water to remove all scabs and scurf; when dry rub this mixture well in: Kerosene and cotton-seed oil in equal parts. Repeat the rubbing after two days. Rub it well into all affected parts with the hand.

No. 25.—BOTS.—A SURE CURE.

The presence of bots is indicated by the horse occasionally nipping at his own sides, and also by red pimples on the inner surface of the upper lip, easily seen by turning up the lip.

Take new milk 1 quart, molasses 1 quart, and give the whole amount as soon as the disease is certainly known. In 15 minutes after give of warm sage tea 2 quarts. In 30 minutes after the tea, give 2 to 3 pints of currier's oil, (according to size of horse;) if the oil cannot be had use melted lard, with 3 or 4 ounces of salt; if the lard cannot be had, dissolve a double handful of salt in 3 pints of warm water and give it all.

CHAPTER XXXIX.

MISCELLANEOUS RECIPES.

The following recipes are offered on their merits. They are not all for diseases of the horse kind, but they all have a value for the designated object. Many of them have been in use for years with unfailing success.

FOR RINGBONE AND SPAVIN.

Aqua Ammonia	-	-	-	-	$\frac{1}{2}$ Ounce
Oil Origanum	-	-	-	-	" "
Red Precipitate	-	-	-	-	" "
Euphorbium	-	-	-	-	" "
Spanish Flies	-	-	-	-	I "
Tinct. Iodine	-	-	-	-	2 drams
Lard	-	-	-	-	$\frac{1}{2}$ pound

Melt all together and stir till cold. Clip the hair off and apply the blister. Grease after two days. You can blister three times, one week apart. This is a sure cure.

LINIMENT, FOR SPRAINS, BRUISES, OR SWELLING.

One pint Turpentine, one pint cider vinegar, four raw eggs. Shake well and let it stand for three days.

Shake well before using.

CONDITION POWDERS.

Pulv. Root Gentian	-	-	-	$2\frac{1}{2}$ Ounces
" Elecampane	-	-	-	2 "
" Sassafras Root	-	-	-	5 "

Pulv. Skunk Cabbage	-	-	-	1	Ounce
" Cream Tartar	-	-	-	1	"
" Saltpetre	-	-	-	2	"
" Sulphur	-	-	-	6	"
" Fox glove	-	-	-	1	"
" Bloodroot	-	-	-	1	Drachm
" Ginger	-	-	-	3	Ounces

Mix and grind well together.

Dose: Give one tablespoonful twice a day.

THE OIL OF GLADNESS.

IN THESE PROPORTIONS.

Alcohol,	-	-	-	-	-	1/2	Gallon
Spirits Nitre,	-	-	-	-	-	1/2	lb.
Aqua Ammonia,	-	-	-	-	-	1/2	"
Oil Sassafras,	-	-	-	-	-	1/4	"
Origanum,	-	-	-	-	-	1 1/2	oz.
Oil Anise,	-	-	-	-	-	1/2	"
Chloroform.	-	-	-	-	-	4	"

This remedy should always be kept tightly corked. It is widely used both internally and externally. Many families keep it constantly and take it in small doses for any ordinary disease. For headache, neuralgia, rheumatism, sore throat or inflammation of kidneys, bathe with this remedy and take one fourth of a tea-spoonful in a little water. For diseases of the stomach or bowels take internally only, twice a day.

This remedy has been found admirable for horses for almost all complaints. For sweeny, sprains, bruises, or swellings or any malady where the skin is unbroken apply as a liniment. For internal ailments, as colic, disease of the kidneys, etc., a dose for a horse is one ounce in half a pint of water, twice a day.

FOR HORSE DISTEMPER.

Use one tablespoonful of oil of hemlock,—pull out the tongue and put it on the root—it saves a drench. Then rub on the glands, close up to the jaws, a liniment made of Cedar oil, 2 oz.; Amber oil, 1 oz.; Hemlock oil, 1 oz.; Camphor Gum, 1 oz.; Saltpetre, $\frac{1}{2}$ oz.; Alcohol 1 pint.

TO PROTECT THE HORSE FROM FLIES AND ALL INSECTS.

Walnut leaves, 4 ozs.; Lobelia leaves, 4 ozs.; boiling water, 1 gallon. Let the mixture stand till cool, then express the liquid through cotton cloth, and add 4 ozs. of Tincture of Cloves. Apply a small quantity all over the body with a sponge.

WORMS.

Take equal quantities of pulverized ginger and copperas and give a tablespoonful once a day.

When the horse's legs are swollen, give a tablespoonful of saltpetre once a day for four days.

FOR COLLAR GALLS.

Alcohol with all the saltpetre it will dissolve. Apply when you put on the collar and when you take it off.

A WASH.

For wounds from barbed wire, inflamed face, fresh cuts or any inflammation of the skin : One tablespoonful of saleratus in one quart of buttermilk.

This remedy looks too simple to be of any value, but nothing is cheaper or more convenient. Try it.

FOR SCRATCHES.

One pint cider vinegar, adding four tablespoonfuls of

sulphur. After making the ankles clean with castile soap and warm water, wash with this preparation. Three or four applications will cure an ordinary case.

SCRATCHES—ANOTHER.

What will cure one horse of scratches may not cure another, so here are other remedies: Wash clean with castile soap and warm water. One ounce sugar of lead; one ounce burnt alum, half an ounce sulphate of zinc, one quart of rain water. Apply when the ankles are dry. In three or four days a cure is quite certain.

FOR SCRATCHES—ANOTHER.

First keep clean. In mild cases apply linseed oil. If severe, take of copperas $\frac{1}{4}$ lb., castile soap $\frac{1}{4}$ lb., and the whites of four eggs. Melt all together and bind on every night for three nights.

FOR SCRATCHES—ANOTHER.

Goulard's Extract	-	-	-	-	2	Ounces
Sweet Oil	-	-	-	-	2	"
Collodion	-	-	-	-	$\frac{1}{2}$	"

Mix. Wash the feet well before applying. Dry the feet and apply.

TO CORN BEEF.

This recipe is from a practical butcher, widely known for the excellence of his corned beef:

Salt,	-	-	-	-	7	lbs.
Sugar	-	-	-	-	3	"
Saltpetre	-	-	-	-	2	oz.
Black Pepper	-	-	-	-	2	"
Salteratus	-	-	-	-	2	"

For every one hundred pounds weight of beef.

LAUNDRY SOAP.

There is often inquiry made for a recipe for making a good quality of soap for domestic use. Here is one that has been widely used and which has met with great favor:

Take $7\frac{1}{2}$ lbs. Sal. Soda, 2 oz. Borax, 1 oz. Sulphate of Soda, and $8\frac{1}{2}$ lbs. good yellow bar soap. Dissolve the Sal. Soda, Borax and Sulphate of Soda in $4\frac{3}{4}$ gallons soft water, till not a lump remains. Melt in the above solution the bar soap; cut the soap in very thin slices that it may dissolve quicker. While dissolving keep stirring so as to mix them well. When the soap is melted it is then done. Remove from the fire and let stand an hour, then pour into pails or lard firkins. A common tin vessel will do to make the soap in. If it is inclined to boil over, a little cold water thrown in will settle it. For perfumes, if desired, add 1 oz. of sassafras, just before it is cool.

CONDITION POWDER FOR HOGS.

There will be readers of this book who would like to know of a safe and effectual condition powder for hogs. Here is one that has been well tried and that has succeeded. It is palatable to swine, and they will eat it readily. Let them have all they will take of it in a trough given them for the purpose and no epidemic will disturb them.

Copperas,	-	-	-	-	1	lb.
Sulphur,	-	-	-	-	1	lb.
Black Antimony,	-	-	-	-	1	"
Saltpeter,	-	-	-	-	$\frac{1}{4}$	"
Common Salt,	-	-	-	-	4	"

Wood ashes. - - - - - 1 Peck
Grind fine, mix and place in their trough.

REMEDY FOR DIARRHEA IN YOUNG COLTS.

This malady comes of acidity of the stomach and bowels. Give a tablespoonful of lime water, a tablespoonful of paregoric and a teaspoonful of fluid extract of ginger in a teacupful of milk in a bottle two or three times a day; oftener if a bad case. If persistent, substitute laudanum for the paregoric, and give brandy in tablespoonful doses in sweetened water several times a day.

FOR THRUSH IN THE FEET.

Clean the foot thoroughly, then apply a strong solution of Blue Vitriol. Or, sprinkle on the sole a quantity of dry calomel.

A UNIVERSAL OINTMENT.

Resin, 4 ozs.; beeswax, 4 ozs.; lard, 8 ozs.; honey, 2 ozs. Melt slowly, bringing it gently to a boil. At boiling heat take it from the fire and slowly add less than a pint of spirits of turpentine, stirring all the time and stir till cool.

This ointment is an extraordinary remedy for bruises in flesh of animals, as injured hoofs, galled backs, broken knees, cracked heels, or any kind of wounds. It is also good to take fire out of burns, or scalds, and to cure chill blains.

PART EIGHTH.

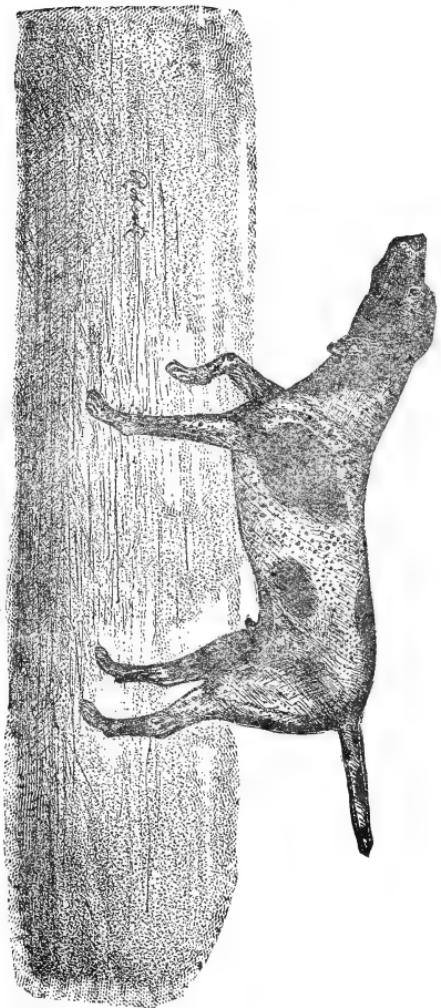
CHAPTER XL.

THE DOG.

THE TEACHABLENESS OF DOGS.

The dog can be trained to do anything that an animal without hands or voice can do. He was the first creature that deserted his natural confederates and allied himself to man. His surrender was complete. He left his forest home, his independent search for food, made the abode of man his preference, contentedly accepted any food given him, and devoted himself to the capture of his unsurrendered fellow creatures for the use of his master. Of all the animals that have at any time submitted themselves to man there are none that take on so readily as the dog the tempers and passions of man, as anger, jealousy, envy, love, hope, hatred and grief. He shows also generosity, gratitude, pride and fear. Baron Cuvier calls the dog, “The completest, the most singular, and the most useful conquest ever made by man.”

In the dog, as in man, we prize the highest, inherited qualities. In both if we desire a good performer in any art, we select him early from a family that excels, and then give him the finest education in the desired studies. Generations of education and of good habits give alike to man and dog a tendency to learn, and a facility of comprehension, so that the dog trainer has



NO. 13.—THE POINTER.

many more chances of success, and so has the dog, if both be from an educated ancestry. It is possible to bring in a densely ignorant dog and admit him to the aristocracy of intelligence, but one rarely has the time and patience for the slow process. We want the puppy of clean limb, of fine hair, of good eye, of bright intellect, and of good family.

If you would train your own dog you must go at your work as you would to train your own boy. Begin early. Pre-empt his mind with thoughts and ambitions that you intend shall rule him while he lives. Do not hope to teach him everything in a week or two. You will save time by getting his confidence first. Make him believe that you are his best friend. Let food follow obedience till he believes they are cause and effect. His mistakes must not be treated as willful crimes. Until you get into sympathy with him, and until he shows his love for you, your progress will be very slow. The art of winning a dog's gratitude and love need not be given in books. If you cannot invent its methods you have no gift for teaching dogs.

CHAPTER XLI.

THE DOG'S PRIMARY EDUCATION.

Your pup should early learn the use of the collar. He need not wear it all the time, but it should be on him a part of every day, and always when he is taking his first lessons. He should also wear a rope or chain until he is well used to it and knows well the difference between being tied and being at liberty. He must learn, by being tied up in a comfortable place, to be quite contented with the chain. If a young dog is tied with a rope he will soon learn to gnaw it off, and run away, and it will be sometime before he forgets that he outwitted you.

Feed him yourself. Do not allow any one else to carry him his food. When he is so accustomed to all these steps that he is no longer restive, you can go on with his lessons. Now take his breakfast to him on a plate, and put the plate just out of his reach, so he cannot touch it. Bring him out now the length of his chain and let him taste his breakfast, pull back the plate and say "To-ho," the word having the accent and the falling inflection on the second syllable. Keep it away from him till he becomes quiet, say for a second or so. Then suddenly pushing the plate towards him, say "On," repeating the lesson till he will stop eating at the word To-ho. He is to be patted or petted whenever he shows any signs of having comprehended the orders. When you have him where he will stop eating

at the word, put a long rope on his collar and go with him to walk. As he trots along and the rope drags after him, suddenly step on it near to him and say "To-ho." When he stops as he must, do not keep him standing, but step off the rope and say "On." Keep working at this lesson till he will stop without your touching the rope, without any rope at all. He is then ready to learn to charge.

CHARGE.

Take him into the barn on the floor, where there is nothing to attract his attention. Then with a short rope on his collar, place your hand on his back just behind his shoulders. Press him down to the floor and say "Charge." Now begins your work. He will probably roll up on his side, or jump up and struggle to get away. Do not say a word. Place his forward paws before him, and his hind paws under him, and his tail extended out behind on the floor. Don't stop till he is willing to remain in this position. These lessons must be thoroughly taught, one at a time. He will come after a while to assume this posture at the word, charge.

While you are teaching him to charge, take him out occasionally and give him rehearsals of what he has already learned. He has now learned To-ho, and to charge. Now he can learn to come to us when we want him.

TO COME WHEN HE IS CALLED.

Now the cord or rope comes in again. Let him go with us for exercise, and let him run and drag the rope after him wherever he likes. Blow on your

whistle and jerk on the rope to get him to look at you or to notice where you are. When he looks around, swing your arm in front of you and say, "Come in." When you give the word be sure you are in position to take hold of the rope and fetch him to you. This is to be continued till he will come without any rope. He must often practice what he has learned, but great care must be taken not to confuse him by mixing up his lessons, of which he now has three.

TO QUARTER HIS GROUND.

Take him out into an open lot or field and let him run till he gets the play out of him and becomes quiet. Then call him with a whistle or a word. He will soon know his owner's whistle from any other. Pat him, cluck to him and tell him to go on. Then throw something, when he looks, to the left, something good to eat, and let him go and get it. Then attract his attention and throw something to the right. By these motions and by his finding his toothsome reward, he will become accustomed by practice to follow them. You will sometimes have trouble in teaching this lesson to a dog, and again it will be comparatively easy. It will be very likely to require a great deal of time and it will need a great many repetitions. He will after a while take in the object which is to scour his field well and find any game that may be lurking in the grass. In any of these lessons the dog must understand that all this is business and after it he may play if he wants to.

TO RETRIEVE.

It is not best to teach a dog to look for, and bring in the killed or wounded game, until he has all the pre-

ceding lessons well learned. He will probably be a year old when he learns to retrieve and before he undertakes this lesson he should have acquired a readiness and facility in learning, and a habit of prompt obedience. Most dogs of good hunting stock will take to retrieving naturally, especially if allowed to hunt with a well instructed dog.

Before he is taught anything about retrieving, proper, the trainer will do well to take the young dog out for his exercise often, and occasionally take him to the water in company with another dog that knows his business. The master should have on hunter's boots, and should wade around in the water calling in the old dog and inducing the young dog to go in also, so that he will not be afraid of the water. When he comes to where he will take the water readily and will follow the old dog when he is sent after anything, then you have him far enough in this till he is ready to break in the field. This can be done much more easily by having a well trained dog to take the lead in the lessons in retrieving.

But if you cannot have the use of a well trained dog, give the pup his first lessons on the barn floor, where he cannot get away. Throw a ball or something, and tell him to fetch it. Then if he pays no attention, or if he does not go, go to him, open his mouth, place the article in it, hold his mouth shut with one hand, and leading him back, without hurting him. Work gently and perseveringly till he will go after the piece and fetch. If the dog has developed any aptness at all to learn, this lesson can be better given in the field than in any other way.

TO POINT.

The outline of methods here given is ample for one who desires to train his dog for his own use. But if the animal is wanted for a fine field performer it would be better to procure at once a professional trainer. Having taught him these lessons thoroughly, take him to the field and try him. When he strikes game and begins to come down, keep cool yourself. Walk up to him if he stops; if he does not stop, speak to him, saying, "Toho," then if he stops, walk up to him and pat him. It would be well to have another person along and let him walk in front and get the birds to rise, and be sure and get one if possible. All this time you are paying attention to your dog, holding him in position, giving him to understand that his duty is to find and point the birds. A very few lessons of this kind will make him staunch on point.

The dog must not be allowed to range too far from his master. Keep him within hearing so you can guide him with your voice, otherwise you may lose control of him. If he gets away and runs at his will he will make himself troublesome. If he is well taught in the yard to obey he will generally be obedient in the field. But if he should run wild in the field do not allow yourself to get excited over it. Keep cool and do not speak louder than just enough to make him hear. When you can get hold of him make him do whatever you had ordered him to do. Do not leave the spot till he perfectly obeys, if you have to stay a week.

It is always to be kept in mind that in all contests between a trainer and his dog, the trainer must come

out ahead. Let the dog outwit you once, or disobey, and it may be troublesome to regain your authority over him. You must come out ahead every time.

The books that tell of dog training are very explicit and give details of management at every juncture. But you must get the general idea in your mind and use your judgment. You will be the only one who knows the situation. You will also study the character of the dog, as the timid and the headstrong must each one be handled in a way to impress him, and to subject his will to yours. It may be necessary, before you finish his education, to carry a whip to the field and to use it with discretion. But no dog should be punished until he can understand well what it is for. Then put him through the lesson again and again till you secure perfect obedience.

A young dog often gives trouble to a hunter by pointing on rabbits, cats or hens. This is easily broken up by penning him up where he cannot reach these creatures and let him point them for a week at a time if he wants to. He will soon learn that they are not to be noticed. This will be a much better way to teach him than it would be to punish him for it.

CHAPTER XLII.

THE SHEPHERD DOG.

It is nonsense to try to make a shepherd dog of a terrier, or of a hound. In some way, who can tell how? the things that a dog can learn best depend on what family of dog he belongs to. If you want an educated shepherd dog, look for a pup of that kind. The less he has been taught for the first half year the better. He can easily learn, with the aid of a cord, that he cannot get away from you; lesson No. 1. Then with a strap and the word "Here," he can learn that he is to come when told; No. 2. Be sure to give one lesson a day for about an hour, and to have one thing at a time to be learned, and but one word for each order to be given. When he comes up to you he is to be told, "Do," and petted, and with that word he will learn he is released from duty; No. 3. Then he is to be taught "Go" by pointing and pushing and coaxing until he begins to "Go;" No. 4. As he starts he can begin to learn the word "Halt," by the effect of the rope and the word; No. 5. And if these lessons are well learned, in a month you can pat the head of both pupil and teacher. To make him bark when you like, you will take him when hungry and say, "Speak," and offer him a dainty bit. This will soon be learned. You can at any time teach him to go out by pointing to the door and saying, "Out." Each special thing well taught to him will be a help for him to learn the next. With a rope's end he can be taught to take

hold at the word "Up," as he will afterwards take a cow's tail, and with the word "Do" he will learn to let go. With this start you can add words as you like, for example, you can say, "Go, Right," and with a motion, send him to the right, or to the left, teaching but one thing at a time, always. The word "Fetch" can always be kept for the sheep, "Get," for the cattle and "Bring," for the horses. You can, as soon as one lesson is well learned, put a few other words to the one-worded orders as, "Come here," "That will do," "Go out," "Speak to them," "Wake them up," "Fetch the sheep," "Get the cattle," "Bring the horses," etc. The practical lessons can easily be given with or without a trained dog.

THE WATCH DOG.

To train a watch dog obtain a young dog of a good strain for the purpose, and do all the training by the same hand. Follow the suggestions given above. Give daily, practical lessons. Give him something and tell him to watch it, and practice him with some stranger essaying to take it from him. At first make his lessons short and always let him begin hungry and feed him as soon as he is done. He very soon learns his duty.

CHAPTER XLIII.

THE TRICK DOG.

It is very easy to teach a mongrel cur almost any amusing little trick. The well descended, carefully bred dog will only learn the tricks of his own trade. The first thing to teach any dog is to come to you. This is easily done with a cord, suiting the action to the word.

TO SIT DOWN.

A few times setting him down, giving at the same time the word "Sit down," chucking him under the chin to keep his head up, will give him the idea. Pat him and reward him, and give him frequent practice and it is done.

TO MAKE A BOW.

As soon as he has learned to sit down, use the words "Make a bow," putting him through the motions with your hands often enough, and in a few days he will have it.

TO SIT UP.

Try him first in the corner, putting him in the position and telling him to sit up, and as soon as he does it for half a minute caress him and reward him, and let him end it when you tell him, "That will do." You have only to repeat it often enough and try him against the wall, and then set him out on the floor. All that this will need is patience for complete success.

TO STAND UP.

A hungry dog will do anything for food. To make him stand up, offer it to him, holding it well up and keep it up long enough, saying to him "Stand up." Keep doing this, giving him a lift now and then with your other hand, repeating the word as often as he tries it, and saying "That will do," when he must go down. He must often rehearse all he has learned but the lessons should not be mixed, but let him have a rest between them.

TO GET INTO A CHAIR.

This is also easily taught. You can in many ways coax him into a chair, always using the word "Chair" whenever you call him to it. After having him used to jumping into the chair at the word, and always rewarding him with caresses and whatever he likes best to eat, you can extend the trick by saying "Up" and putting his feet up on the back of the chair. This done, by many times trying, he will put his head down on his paws with the aid of your hand and the sound of the word "Down," each time rewarding him. From this there is one step more; it is to jump over the chair, which you can soon persuade him to do.

TO JUMP THROUGH A HOOP.

The methods will suggest themselves by which the dog can be made to jump through your arms, your hands being held together. Then if he is hungry he will jump through a hoop at the tap of the stick, for a bit of meat, then successively through several hoops and boxes.

TO GO TO THE POST OFFICE.

Your dog can carry your mail to the post office and bring your mail to you as many times a day as you choose to send him. You can easily teach him to carry a stick in his mouth until you tell him to give it up. Reward with a good bite of food and caress him. Then teach him to carry a basket. He can then begin to go with you to the post office where an inmate of it must help you by caressing him, giving him a little choice food, taking the basket and changing the mail and putting the handle of the basket in his mouth and saying, "Home." You are to say, "Post office" to him every time you take him or send him. He will soon be able to go himself, wait at the door to be welcomed and then set out for home. Instead of the post office, he will do the same for the grocery.

He will need definite practice on each one of these, not mixing them up, but taking one trick at a time, and dismissing each one as soon as it is done, by saying, "That will do," and giving him his reward.

These hints will enable the beginner to make a prodigy of his dog in a few weeks. Other things may be added for all things are not equally easy to every dog. The greatest value to the dog will be, not in these unmeaning things, but in doing such useful things as will save human labor, or tend to the security of property or life.

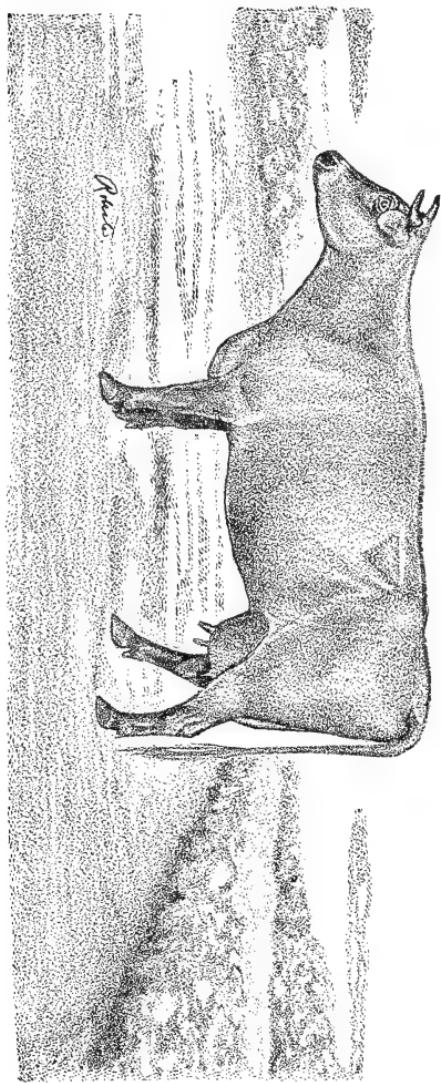
PART NINTH.

IMPROVE YOUR CATTLE.

CHAPTER XLIV.

SELECTING A DAIRY COW.

Generally, where a horse is kept, there is both room and necessity for a cow; and sometimes where there is room for but one, the cow is selected. The health and comfort of a family are greatly promoted by abundance of fresh milk without either chalk or water. It is important to every one to learn the signs by which nature certifies to a cow's good character. They are unmistakable. A model, useful, dairy cow may be known at a glance by an expert. She has a fine, long head, broad between the eyes, and a thin wide muzzle; the eyes are large and of a mild expression; the neck is thin and long; the ears are thin and covered within with a deep yellow skin; the forequarters are light and thin, and the whole body has much the shape of a wedge, increasing in size to the rear; the legs are thin, with fine bone; the belly is large and deep, with great capacity for food; the back is broad and straight and the ribs are well rounded towards the rear; the bones of the rump are wide apart; the tail is long and thin; the thighs are thin and set widely apart; the udder is large and full, especially behind; the teats are of good size, and set far apart upon a broad, level udder, and the milk vein, so called, which is the large



NO. 14.—THE DAIRY COW.

vein leading from the udder and passing into the abdomen, and which is an indication of the amount of blood circulation through the milk glands, and contributing to the milk secretion, should be full and tortuous in its short course. A fine horn, a deep yellow skin, and a general elegance of form, without any heaviness or beefiness in any part, are also important indications of good quality in a cow for the dairy.

BREEDING DAIRY COWS.

“Like begets like,” therefore, in breeding cattle for the dairy, select the very best milkers and breed them to bulls known to come from a family with good milk record. In purchasing a bull, it pays better to give a good price for a good animal, than a small price for a poor one. Breeding will not count for much without good feeding and good care. Don’t make the mistake of supposing that a good bull is going to double or treble the value of a common herd unless the cattle all have the best of care. Breed is largely dependent upon feed and training, and if good feed and training has given value to a herd, a lack of it will soon cause the breed to deteriorate.

TO TELL THE AGES OF CATTLE.

The *Live-Stock Record* gives a new and evidently a well-thought-out rule for telling accurately the ages of cattle, which is here appended :

“A heifer has no rings on her horns until she is two years of age, and one is added each year thereafter. You can, therefore, tell the age of a cow with tolerable accuracy by counting the rings on her horns and adding two to the number. The bull has no rings,

as a rule, until he is five years old, so to tell his age after that period, add five to the number of rings. The better way to tell the age is by the teeth, which is, of course, the only way with polled cattle. What are called the milk teeth gradually disappear in front. At the end of three years, the second pair of permanent teeth are well grown, at four years the third pair and at five the fourth and last pair have appeared, and at this time the central pair are of full size. At seven years a dark line caused by the wearing of the teeth appears on all of them, and on the central pair a circular mark. At eight years this circular mark appears on all of them, and at nine years the central pair begins to shrink, and the third at eleven. After this period the age can only be determined by the degree of shrinking generally. At fifteen the teeth are nearly all gone. ”

THE SIZE OF THE Cow.

There are several sizes of cow, none of which is agreed upon as being the best. The Jersey is the smallest, then we have the Ayrshire, the Holstein and the Durham. The largest breed will require more food to keep beef ready for market than does the smaller. When the butcher comes to buy a cow he will give more money for the Durham than for the little Jersey, but then is it economy to keep up all the furnaces and the food for making beef many years before it is to be sold? The *American Dairyman* says: “ It is useless to talk about carrying large cows, with a view to making beef of them, when no longer useful in the dairy. This is sheer nonsense, though every

other dairyman has a sneaking faith in the idea. No man should be so foolish as to carry several hundred pounds of blood and bone eight or ten years to make second-hand beef of it in the end."

It is reasonable to believe that a medium sized cow, say of the larger breeds 800 to 1000 lbs weight, would be an economical feeder, could be rushed for milk if need be, would require not over much room in the stables, would likely produce good calves, and would likely be of a sound constitution. With a cow of such size you will not have to feed the furnace for beef-making and keep it up for ten years before you want to sell the beef. Two medium cows will give you more than double that of an over grown one, in milk and beef, and will give you twice as many calves; and the two cows will sell more readily than one very large one.

CAKE IN Cow's BAG.

This is one of the most common complaints in the cow-yard. There is no need to have it trouble the cow for as much as a day. Take two parts kerosene and one part lard. Warm, mix, apply. It is a sovereign remedy.

CHAPTER XLV.
VALUABLE INFORMATION.
MANY USEFUL FACTS.

A barrel contains	-	10752	cubic inches.
A bushel	" - -	2150 2-5	" "
A standard gallon (liquid) contains	231	" "	"
A gallon (dry measure)	" 268 4-5	" "	"
A gallon of pure water weighs	-	8.339	lbs.
Loaf sugar, broken, 1 qt. is	- - -	1	"
White " powdered, 1 qt. is	- - -	1 lb., 7 oz.	
Ten eggs are	- - - -	1	lb.
A common tumbler holds	- - -	½	pint
A quart of wheat flour weighs	- - -	1	lb.
A " corn meal	" - -	1 lb. 2 oz.	
A pint of soft butter	" - - -	1	lb.
A " sugar	" * - -	1	"
A tea cup holds	- - -	1	gill
Four large tablespoonfuls equal	- - -	½	"
A tablespoonful (large)	" - -	½	oz.
A teaspoonful	" - -	1	drachm
Three teaspoonfuls	" 1	tablespoon or ½	oz.
Sixty drops make a teaspoonful or		1	drachm.
A ton of soft coal requires	50	cubic feet of space.	
A " hard "	46	" "	"
A " coke "	70	" "	"
A " charcoal "	104	" "	"
A million dollars in gold coins weigh		1 2/3	tons.
A " " silver "		26 3/4	"

A million dollars in small silver coins weigh 25 tons.
 A " " " 5-cent nickels " 100 "
 A ton of pure gold is worth - \$602,799.21
 A " " " silver is " - - 37,704.84
 A bushel of corn will make 10½ lbs. of pork.

TABLES OF WEIGHTS AND MEASURES.

CLOTH MEASURE.

2½ inches 1 nail, 4 nails 1 quarter, 4 quarters 1 yard.

DRY MEASURE.

2 pints make 1 quart, 8 quarts 1 peck, 4 pecks 1 bushel, 36 bushels 1 chaldron.

APOTHECARIES' WEIGHT.

20 grains make 1 scruple, 3 scruples 1 drachm, 8 drachms 1 ounce, 12 ounces 1 pound.

AVOIRDUPOIS WEIGHT.

16 drachms make one ounce, 16 ounces 1 lb., 25 lbs. 1 quarter, 4 quarters 100 weight, 2000 lbs. 1 ton.

LIQUID OR WINE MEASURE.

4 gills make 1 pint, 2 pints 1 quart, 4 quarts 1 gallon, 31½ gallons 1 barrel, 2 barrels 1 hogshead.

LONG MEASURE—DISTANCE.

3 barleycorns make 1 inch, 12 inches 1 foot, 3 feet 1 yard, 5½ yards 1 rod, 40 rods 1 furlong, 8 furlongs 1 mile.

TROY WEIGHT.

24 grains make 1 pennyweight, 20 pennyweights 1

ounce, 12 ounces 1 pound. This is for gold, silver and jewels.

ALL KINDS OF MEASURES—DISTANCE.

3 inches make 1 palm, 4 inches 1 hand, 6 inches 1 span, 18 inches 1 cubit, 21.8 inches 1 bible cubit, 2½ feet 1 military pace.

SQUARE MEASURE.

144 square inches make 1 square foot, 9 square feet 1 square yard, 30¼ square yards 1 square rod, 40 square rods 1 rood, 4 roods 1 acre, or 160 square rods 1 acre.

CUBIC MEASURE.

1728 cubic inches make 1 cubic foot, 27 cubic feet 1 cubic yard, 128 cubic feet 1 cord (wood) 40 cubic feet 1 ton (shipping) 2150.42 cubic inches 1 standard bushel, 231 cubic inches 1 standard gallon. 1 cubic foot is four-fifths of a bushel.

A BUSHEL BY WEIGHT.

A bushel of Wheat is on an average 60 lbs. ; Barley or Buckwheat, 46 lbs. ; Indian Corn or Rye, 56 lbs. ; Oats, 30 lbs. ; Salt, 70 lbs. ; Potatoes, 60 lbs. ; Peas 64 lbs. ; Beans 63 lbs. ; Clover Seed, 60 lbs. ; Flax Seed, 56 lbs. ; Timothy Seed, 50 lbs. ; 14 lbs. of Lead or Iron, make 1 Stone ; 21½ Stone 1 Pig. The Imperial Gallon is 10 lbs. avoirdupois of pure water ; the Pint, 1¼ lbs.

ALL KINDS OF MEASURES—QUANTITY.

12 things make 1 dozen, 12 dozen 1 gross, 12 gross 1 great gross, 20 things 1 score, 196 lbs. flour 1

barrel, 200 lbs. beef or pork 1 barrel, 135 lbs. potatoes or apples 1 barrel, 280 lbs. salt 1 barrel, 200 lbs. sugar 1 barrel, 240 lbs. lime 1 barrel, 200 lbs. fish 1 quintal, 100 lbs. nails 1 keg. To make one box requires 50 lbs. soap, 20 lbs. raisins, 2 lbs. cigars, 20 lbs. Soda, 40 lbs. cheese, 25 lbs. tobacco, 62 lbs. tea, 60 lbs. saleratus, 25 lbs. chocolate, 56 lbs. butter 1 firkin, 5 lbs. spices 1 can, 1100 lbs. rice 1 tierce, 2150.42 cubic inches 1 bushel, 231 cubic inches 1 bushel, 14 lbs. 1 stone, 43560 feet 1 acre, 100 square feet 1 square, 5280 feet 1 mile, 24 $\frac{3}{4}$ cubic feet 1 perch of stone, 128 cubic feet 1 cord.

A Few Good-Bye Words.

The object of this book is to enable every horse owner to be the trainer and the doctor of his own colts and horses. Of its success the reader is now the judge. I also hope that the methods used will be less cruel to the animal and more satisfactory in their results, for the suggestions given here. And now, if I were to send an emphasis back through these pages, it would be to urge all who handle horses :

1. Be gentle with the colt that is not wicked but nervous. Perhaps hard treatment has made him suspicious and timid. Some colts are frightened and will kick when you give them a dry straw bedding. That means that in the process they have sometime been hurt with the pitchfork. Do not think him wicked for he is only nervous, and is on the alert to defend himself. Use the pole described in chapter iv, until he understands that no touches about his body, legs or head, will at all hurt him. Take the pole instead of your hands, because the trainer may be hurt by being too near, before the colt has learned his lesson. If he is afraid of the harness, or of handling in any way, the pole will the most certainly and most speedily quiet his nerves, and teach him he is in no danger.

2. Training a colt is done more easily at the age of two years, than it is ever done afterwards. At that

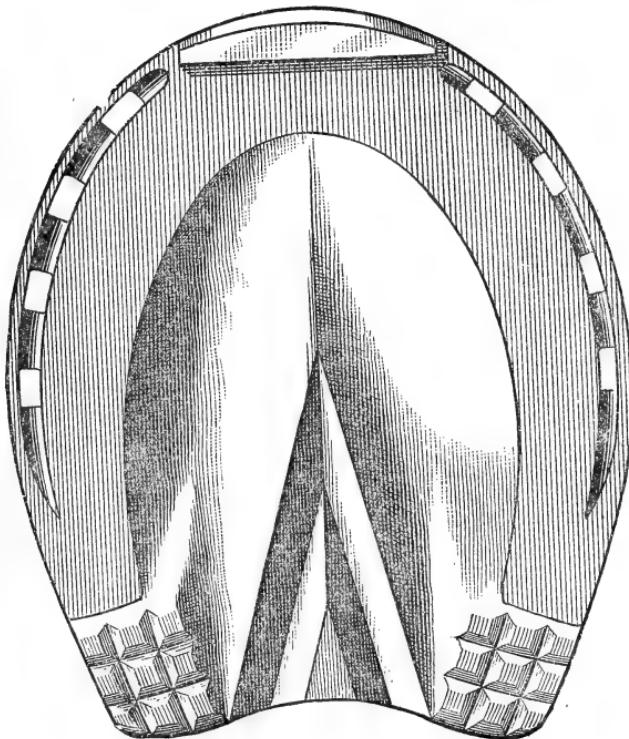
age the colt has not learned many bad habits, he is not headstrong, he is tractable, will more readily give up. Even if the owner does not need the work of the two-year-old, it is better to give him his lessons and once in a while give him exercise in the harness for the next year, and he will be a better horse for it as long as he lives. No need then of surcingle and ropes, or of pulling him to his knees. If the owner raises but two or three colts a year they can be kept as tame and gentle as old horses, from colthood up.

3. I would like to make the personal acquaintance of persons who may be benefitted by this book, especially if there is anything here that needs further explanation. My offer to go anywhere within five hundred miles from Chicago to cure a horse of any vicious habit, almost entirely at my own expense, as I state on page 10, will indicate to the public my confidence in my methods. It will be easily guessed out that my confidence is the outgrowth of unfailing success in that difficult form of horse-training.

THOS. JEFF. MURRAY,
SANDWICH, ILLINOIS.

DEMPSEY HOOF PAD, or FOOT CUSHION.

Patented July 13, 1886. No. 845,283.



View of the Bottom of the Foot when Pad and Shoe are Properly Adjusted

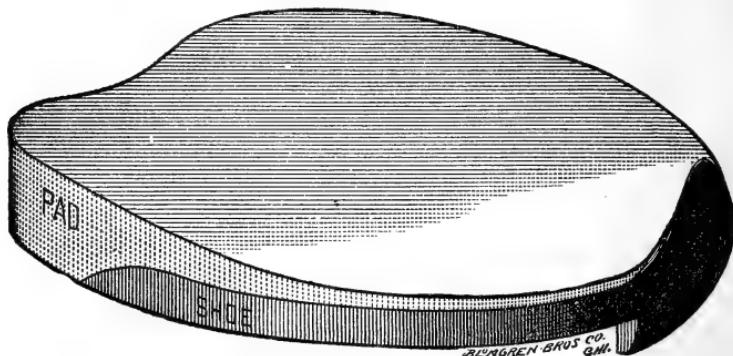
— IF YOUR HORSE HAS —
**CORNS, QUARTER CRACK,
CONTRACTED TENDER FEET,
CORNNS, or SAND CRACK,**

It will pay you to shoe him with the Dempsey Pad.

DEMPSEY HORSE SHOE PAD CO.,

59 THIRD AVENUE, CHICAGO.

The most humane appliance ever invented for the relief of tender feet. This pad is recommended and used by first-class Veterinary Surgeons and owners of fine, high-bred horses, and is easily put on by any good horse-shoer, and is not expensive.



Side View of Pad and Shoe.

Mr. Dempsey says his present invention has for its main object to provide an improved foot cushion for use in conjunction with the iron shoes for Horses, whereby the frog of the foot may be kept in constant and natural action, so that it will preserve the foot in healthy condition.

We present the testimonials of several parties, who are familiar with the practical workings of the invention :

From John F. Ryan, Assistant State Veterinary Surgeon,
174 Michigan Avenue, Chicago.

CHICAGO, Dec. 24, 1886.

My experience with the "Dempsey Hoof Pad or Foot Cushion," on feet treated for corns, contraction, quittor, quarter-crack, chronic laminitis, etc., has been perfectly satisfactory. It is the best foot appliance that has come under my notice for the resistance of concussion.

Yours respectfully, JOHN F. RYAN, V. S.

**From Gurney Phæton and Cab Company, the Largest Cab
Company in the West.**

CHICAGO, Nov. 1, 1886.

MR. DEMPSEY: *Dear Sir*—We have used your Pad or Foot Cushion for about two years upon our Horses, and for corns, contracted feet, tender feet of all kinds, it is the best article we have ever seen. It also prevents slipping, and is a protection against the picking up of nails.

GURNEY PHÆTON AND CAB CO.,
45 West Adams Street.

From First-Class Blacksmiths.

We have used the Dempsey Pad for the last four months. During that time we have applied them in cases of laminitis, corns, contracted feet, splints, etc., and to prevent concussion and expanded hoof. They have given entire satisfaction. We can recommend them as the most useful and common sense Pad ever introduced.

FOGARTY & MULCAHEY,
3161 Cottage Grove Avenue.

I have used the Dempsey Rubber Pads for some time, and find that they are not to be surpassed in cases where a horse is troubled with corns, tender feet, etc. JOSEPH DEVEREUX, Practical Horse Shoer,
448 W. 12th St.

The Dempsey Pad is the best thing ever invented for tender feet.
GRANT & TAGERTIUS, No. 3 South Wood St.

LOWELL, MICH., Jan. 1, 1887.

Having had considerable experience with trotting horses, I consider the Dempsey Pad a valuable article to prevent concussion, and to expand the feet, and know positively that it benefits greatly sore footed horses.

BURT WOOD.

I have used the Dempsey Rubber Pads on a mule whose feet were in bad shape, with good results. JOHN W. THOMAS, Coal Dealer,
Cor. Market and Van Buren Sts.

This is to certify that I have used a Pair of the Dempsey Hoof Cushions on a Horse driven in Engine Company No. 18, that had been condemned by the Department, and they gave grand satisfaction. I kept them on him, setting the shoe occasionally, until the Pads were worn out. After that he was shod with an ordinary shoe, and has been going sound ever since, and the heels are as fully developed as ever they were.

JOHN TWADDLE, Driver on Engine 7.

From Drivers in the Fire Department of Chicago.

I used a pair of the Dempsey Pads on a horse for about four months, and they gave entire satisfaction, as the horse could travel and perform his work with greater ease with them.

A. A. FRITCHIE,
Driver of Hose Cart No. 30.

From Liverymen.

CHICAGO, Jan. 4, 1887.

I have used the Dempsey Horse Shoe Pad extensively. I have used them on sore footed horses, and horses suffering from splints, and they expand the hoof and prevent concussion entirely. I think they are just what is required.

B. RANSOM, 3154 Cottage Grove Avenue.

SALE STABLE, Halsted and Taylor Sts., Jan. 22, 1887.

I have owned several horses shod with the Dempsey Pad, and consider it a No. 1 appliance to use on tender and contracted feet.

S. MONROE, Manager.

I have used the Dempsey Hoof Cushion for some time, and they have given me the best satisfaction. I consider them a success not only for lameness, but to prevent slipping, etc.

JOHN McCOY, Livery, 3438 and 3440 Cottage Grove Ave.

THE DEMPSEY PAD CO.:—I have used your Pads on a horse suffering from corns. Previous to using them I could find no shoe or hoof cushion that was of any use in relieving him, and the animal was useless. Since using your Pads I have worked him steadily. I consider them the best Pad in existence for corns and other lameness of the foot, and also to prevent slipping.

J. T. GILBERT, 114 West Marble Place.

We have used the Dempsey Hoof Cushion for some time, with the best results. It not only prevents and destroys concussion, but it gives to the foot a natural bearing which it is impossible to get with any other appliance yet introduced. Horse owners, try it, and derive the benefits arising from its use.

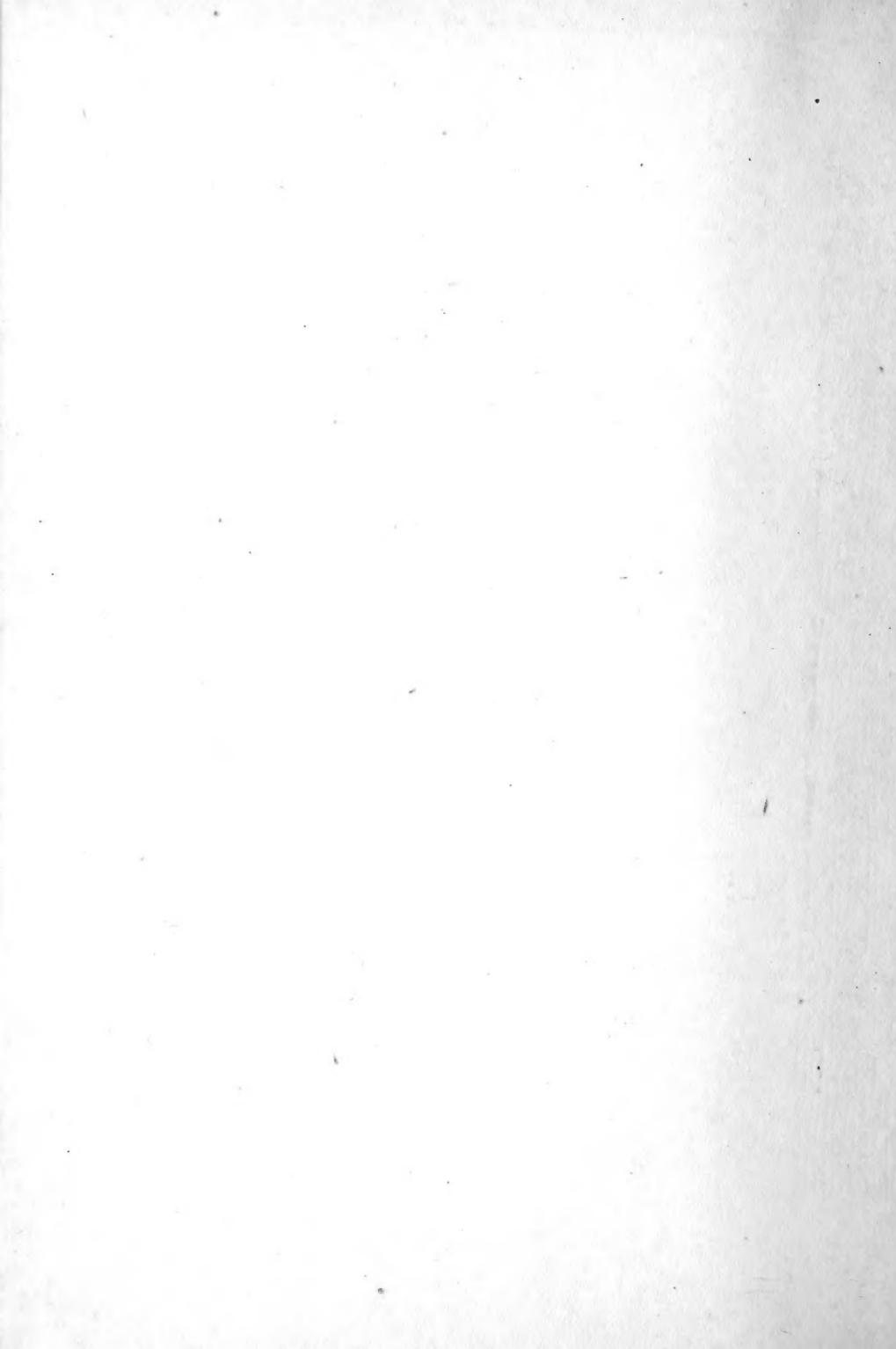
DUNN & HILL, Geneva, N. Y.

If you are in doubt as to the size required, put the bare foot of the horse upon a piece of paper and mark the outline with a pencil, and forward the outline to us.

These Pads are easily put on by any Horse Shoer. For samples, directions, and prices, address

DEMPSEY HORSE SHOE PAD CO.,
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